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APRIL S. WARD BSc Hons

ADOLESCENT IDENTITY FORMATION AND SOCIAL MEDIA

Section A: Social media in the digital age: a new context for  
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formation and young people's developing self-esteem? A thematic analysis  
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SALOMONS

CANTERBURY CHRIST CHURCH UNIVERSITY

## **Acknowledgements**

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## **Summary of the MRP portfolio**

**Section A** critically reviews the current relevant theoretical literature and empirical studies exploring how adolescent social media use is impacting on young people's identity formation and developing self-esteem. Theoretical conceptualisations of adolescent development, and particularly the task of identity formation is explored. The review is structured thematically in terms of research findings. Clinical and theoretical implications are discussed, and what the findings mean for clinical practice and future directions for research are presented.

**Section B** presents a thematic analysis of 15 adolescents' views on their social media use, how it impacts on their developing sense of self, and how their management of feelings -evoked by use of the sites. Data was triangulated between three interview methods; a researcher-led focus group, a participant-led focus group and an individual semi-structured interview. Five key themes were identified; investment, feelings evoked by social media use, motivations underlying social media activities, observations of rules and cultures, and strategies to manage feeling evoked by social media use. Findings suggest that social media has become an important context for identity exploration, and that its use may be placing increased pressures on adolescents' developmental tasks. The findings contribute to an emerging body of evidence in relation to adolescent social media use.

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APRIL S. WARD BSc Hons

Section A:

Social Media in the Digital Age: A New Context for Identity Formation and the  
Developing Self in Adolescence Word Count: 7,997 (694)

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## **Abstract**

Today's youth are the first to grow up immersed in the digital world; with social media in particular becoming an integral part of adolescents' lives. This is a fast evolving and relatively unsupervised world, and little is known about its impact on adolescents' sense of self. From a search of three electronic databases (Assia, PsycInfo and Web of science), this systematic search and review evaluates 11 studies investigating how adolescents use social media to explore their developing identity and how it impacts on their developing sense of self. Psychosocial identity theories, and a summary of adolescent development are presented, followed by a systematic review of the relevant research in this area, including critique of methodologies and contributions to the literature. The research remains at an exploratory stage. Findings indicate that adolescents are actively using social media to explore their developing identities, which impacts on their self-esteem, although the direction of this relationship is unclear. Areas for future research include conducting qualitative research, focusing on clinical populations, and research that seeks to understand more about the motives that underlie adolescents' social media activities, and what strategies adolescents use to manage the range of feelings evoked by use of the sites.

**Keywords:** adolescence, social media, identity, self-esteem, self-concept

## **Introduction**

This systematic search and review (Grant & Booth, 2009) explores the current literature focusing on how social media sites are providing a new context for identity exploration and formation in adolescence. Today's youth are the first generation to grow up surrounded by social media, therefore research involving this population is in its infancy. Expansion of social media has been a world-wide phenomenon in the digital age, and has become an increasingly integral part of adolescents' lives. Current concerns about adolescent social media use centre around issues such as cyberbullying, 'sexting' and exposure to inappropriate content, while knowledge about how to protect young people from its potential harmful effects is limited (O'Keeffe & Clarke-Pearson, 2011a). Anxiety-inducing headlines are widespread in the media- e.g. 'social media obsessed teenagers are so frightened of real life some won't even answer the door' (Mailonline, 2016), which raises anxiety about the impact of its use on wellbeing. Although such concerns are very important to consider, little research explores the potential benefits of its use, nor how adolescents use social media to construct and explore their developing identities and how they view themselves in their day to day lives.

### **Review structure**

This review begins with definitions of key terms, a summary of the relevant extant identity literature and historical social media scholarship, followed by a review of empirical studies that explore how adolescents use social media to explore their identity and how this impacts on their developing sense of self. Only research published between 2006 until the present day will be considered as this is when social media use became prevalent in society. The review will

conclude with consideration of the gaps in the existing research, and reflection on the potential implications for research and clinical practice.

## **The digital age**

'The digital age' has seen a rapid development in technology. The introduction of the personal computer and subsequent related technology revolutionised the way people received and transferred information. Those born during this time, namely after the 1980s, are considered to be 'digital natives' (Palfrey & Gasser, 2013) - a generation that has developed the skills to master technology in a way that is second nature (Palfrey & Gasser, 2013). Conversely, 'Digital Immigrants' refers to generations who have learnt to adapt to the new environment but 'still have an accent' meaning, for example, that they may not automatically turn to an internet search engine to find out information (Prensky, 2001). The 'digital native' versus 'digital immigrant' generational divide means social media use is, to some extent, an unknown and, unsupervised world negotiated by young people which, understandably, creates anxiety for the adults around them.

## **Social media: definition, history and statistics**

### **Defining social media**

The terms 'social media sites' and 'social networking sites' are used interchangeably. Boyd and Ellison (2007) define social media as 'web based services that allow individuals to construct a public or semi-public profile within a bounded system'. Essential characteristics of the sites include: uploading and sharing personal photos or videos, personal descriptors such as name and age, and friends' lists indicating which individuals are connected within a social network

(Robards & Bennett, 2011). The display of social network connections is a key aspect of the sites, because it identifies links to other users that have been granted permission to view one another's social media profiles. Users can communicate with each other by publicly writing messages on one another's profiles, sending private messages or by using functions within the site that allow users to react to users' uploaded content; for example, the 'like' button.

### History of social media

The development and proliferation of social media has proven to be a worldwide phenomenon that has expanded exponentially over the last decade. Although the first social media site, by definition, was launched in 1997, popular use of the sites began in 2003 (Boyd & Ellison, 2007). Facebook continues to be the most popular site, with currently over a billion users worldwide. Launched in 2005 for the exclusive use of Harvard University students, it has been available to the general public since 2006 ('Company Info, Facebook Newsroom').

### Adolescent social media use: current statistics

Statistics show that adolescents are the most prolific users of social media sites. For example, by the age of 15, 89% of young people in the UK have a social media profile (Ofcom, 2016) and 56% of teenagers spend up to three hours per day on social media (Office for National Statistics, 2015). The frequency and intensity of social media use is high in this population group, suggesting that the sites have become an integral part of adolescents' everyday lives.

## **Adolescence and social media**

### Defining adolescence

Adolescence is the period of most rapid development in cognitive, physical, socio-emotional growth, and biological maturation compared to any other stage in the life cycle (Swanson, Edwards, & Spencer, 2010). Defining adolescence in terms of age norms is challenging as no consistent agreement currently exists. The World Health Organisation defines adolescence as 'the period in human growth and development that occurs after childhood and before adulthood, from ages 10 to 19', which is in accordance with scholarship within this subject area (Harter, 1999; Kroger, 2007). However, scholars have argued that adolescence cannot simply be defined by age; rather, it is a dynamic theoretical construct that is conceptualised through cultural, psychosocial and biological lenses (Curtis, 2015). For instance, Arnett (2012) proposes that adolescence is culturally constructed. The experience of being an adolescent and the expectations placed upon them by society can vary greatly between cultures. For example, although autonomy is globally considered a developmental task, independence within an individualistically orientated society is more commonly prioritised over familial identity and obligations (Zimmer-Gembeck & Andrew, 2003).

### Adolescent development and social media use

During adolescence, the development of physical changes in the body and of sexual maturation is rapid, and anxiety around such rapid changes is common among adolescents who are likely to compare themselves to society's idealised view of the physical body (Coleman & Hendry, 1999). Given that the focus on physical appearance is critical on social media, it is not surprising that use of the sites can perpetuate this anxiety (Kim & Chock, 2015).

Physical maturation also involves extensive development of the brain. Mesolimbic dopamine pathways, also known as the reward systems in the brain, develop early in adolescence, often driving young people to seek novel and exciting experiences; however the prefrontal cortex, the area that controls behaviour, does not mature as quickly meaning adolescents are impulsive and ill-equipped to assess risks and the consequences of their actions (Romer, 2010). Digital media provides an abundance of opportunities for constant novel experiences and risk-taking opportunities, it is therefore unsurprising that adolescents are attracted to all it has to offer. However, their limited capacity to self-regulate their behaviour puts them at risk of excessive digital media use (Wu, Cheung, Ku, & Hung, 2013), and their reduced consideration of potential risks and consequences leaves them particularly vulnerable to ‘the disinhibition effect’ - a phenomenon where people behave in less restricted ways online because social restrictions found in offline communication are removed, thus providing opportunity to behave in ways they would not feel possible offline (Suler, 2004). While this applies to all age groups, adolescents may be less likely to consider the consequences of unacceptable behaviour online, which will remain on their digital foot print, thus having significant implications in adulthood. Furthermore, the malleability of the adolescent brain means its development is particularly sensitive to life experiences (Steinberg, 2014). Carr (2010) argues that internet use is in effect rewiring the brain’s neural networks, thus impacting on young people’s emerging cognitive abilities. For instance, he suggests that the ease of gaining knowledge through snippets of information on the internet has affected the brain’s ability to sustain attention, and process long, complex information. Hence, it is argued that social media use is playing a significant role in moulding adolescent cognitive development and influencing how adolescents think and feel about themselves and their social worlds.



As well as physical changes, adolescence is characterised by emotional upheaval and uncertainty as the adolescent attempts to structure their personality and determine their place in society (Waddell, 2002). Separating from parental figures in a bid for independence and autonomy means friendships assume central importance (Music, 2010). Digital media plays to adolescents' prevailing drive for independence, by providing them with a world that is essentially inaccessible to adults. Conversely, Gardner and Davis (2013) argue that being constantly connected to others, particularly parents, reduces adolescents' ability to form an autonomous sense of self. They suggest that digital youth automatically look for external reassurance for even mundane matters, rather than developing trust in their own instincts.

## **Identity formation**

### Defining identity

Cote & Levine (2014) propose that identity is an abstract and complex concept that is challenging to define. They suggest that scholarship surrounding identity has typically taken two standpoints. Firstly, an Eriksonian (1968) view of identity, which refers to 'the sameness and continuity of a person's psychological functioning, interpersonal behaviour and commitments to roles'. Secondly, the self, which is defined as a 'self-organising, interactive system of thoughts, feelings, and motives that characterise an individual. It gives rise to an enduring experience of physical and psychological existence- a phenomenal sense of consistency and predictability' (Cote & Levine, 2014).

Identity formation is viewed as a dynamic process that occurs throughout the lifespan, where both internal and external influences may be involved. Yoder (2000) defines this process as a

‘fitting-together of the personality with the realities of the social world so that a person has a sense both of internal coherence, and meaningful relatedness to the outside world’.

## **Theories of identity**

### *Erikson's psychosocial model*

Erikson is one of the best known theorists to provide an integrative framework to understanding identity development across the lifespan. Erikson (1968) proposed an eight stage life span model of psychosocial development. Each stage symbolises a life ‘crisis’ which, according to Erikson, must be resolved in order for the individual to successfully progress to the next stage.

Adolescence is presented as the fifth stage where ‘identity versus role confusion’ is the central crisis. This stage involves the individual finding out who they are and how they fit into their society, through exploration and experimentation, before committing to a more stable and coherent adult identity. Peer relationships become an increasing preoccupation and the exploration of differing values and belief systems present the adolescent with many choices to consider, in order to “find a niche in some section of society, a niche which is firmly defined and yet seems to be uniquely made for him” (1968 p.156).

Erikson stipulated that individuals who manage this developmental stage successfully reach a level of identity synthesis and stability, which is the experience of feeling ‘self-sameness and inner continuity’ (1968 p.50) across social contexts. In contrast, individuals who struggle to develop a coherent sense of self are said to experience identity confusion, resulting in risks to psychological adjustment (Hernandez, Montgomery, & Kurtines, 2006). Arguably, adolescents in the digital era are faced with too many choices, meaning the decision- making process is potentially more complex and distressing (Arnett, 2002), and identity confusion more likely.

### *Marcia's identity status*

Marcia (1966) further operationalised Erikson's theory by introducing four ways that adolescents address identity issues: identity achievement, moratorium, foreclosure, and diffusion. An individual who is said to have 'achieved' an identity has undergone a series of explorations before committing to self-chosen life choices. Conversely, an individual who has not engaged in an exploratory process or made any life commitments is considered to be in identity diffusion. The foreclosure status refers to individuals who have made commitments but without undergoing any process of exploration or questioning and, instead, are following parent- selected goals and life choices. Moratorium is an unspoken societal agreement that adolescents are granted interregnum: a time characterised by a temporary delay in commitment to adult responsibilities to contemplate who they are through exploring the many choices on offer in society. Marcia proposed that an individual's identity status can impact on personality characteristics, patterns of interaction and wellbeing (Marcia, 1980). Individuals who are said to be defused are more likely to have difficulty with self-regulation and social functioning (Côté, 2009) and be at higher risk of engaging in harmful behaviour. Kroger (2007) defines aspects of identity diffusion as low selfesteem and autonomy. These can result in issues with adapting to new settings and having a tendency to defensively avoid issues.

### **The self: self-concept clarity and self- esteem**

These constructs are detailed conceptualisations of the self that are at the core of identity (Weinreich, 2003). Campbell et al. (1996) defines self- concept clarity as 'the extent to which self-beliefs are clearly and confidently defined, internally consistent and stable', a notion that is closely associated to Erikson's theory of identity synthesis (Davis, 2013). Campbell et al. (1996)

also suggest that self-concept is correlated with self-esteem, which is defined as one's overall attitude towards the self and one's sense of self-worth and is strongly correlated with an individual's sense of wellbeing (Rosenberg, Schooler, Schoenbach, & Rosenberg, 1995).

Cooley (1902) proposed a 'looking-glass-self' model of self-esteem, which suggests that an individual's social world acts as a social mirror, or sounding board, whereby the internalisation of the opinions of significant others dictates an individual's global self-esteem. Harter (1999) suggests adolescents are more likely to meet their need for companionship and intimacy from friendships, which contribute to the enhancement of personal worth. She also suggests that early adolescents are preoccupied with how others view them and this continues through to mid adolescence. However, in adolescence, they can become confused about what personal characteristics to assume and what is one's true self, which can have varying impacts on self-esteem. Harter (1999) also suggests that appearance, is influential in contributing to an individual's feelings of overall self-worth, and that individuals who are highly concerned about the opinions of others are most at risk of fluctuations in self-esteem.

### **A new context for identity formation**

Social media has become a central hub in adolescents' social lives; adolescents can access sites via portable devices, enabling them to be connected on a 24-hour basis and on a global scale. Early internet scholarship focused on the opportunities for presenting multiple identities on online environments. Turkle (1995) described how individuals took advantage of the anonymity of multi-user dungeons to experiment with unexplored aspects of identity. However, an increase in digital media users means there are now fewer opportunities to be anonymous online,

therefore, research is now revealing greater congruence than previously thought between online and offline realities and that online and offline contexts are psychologically connected

(Subrahmanyam, Garcia, Harsono, Li, & Lipana, 2009)

Social media is constructed in a way that encourages users to express their identity through a plethora of tools. Gardner and Davis (2013) suggest that adolescents in the digital age construct their identities in an externally orientated manner compared to pre-digital youth, by placing strong emphasis on how others view them. They suggest that adolescents present a ‘packaged self’ that presents the positive aspects of their lives and omits the less desirable aspects, leading to increased self-focus that can be tracked through quantitative feedback such as number of ‘Likes’ and the constant use of digital media has destroyed ‘downtime’, which is key for enabling individuals to reflect upon and contemplate who they are. Turkle (2012) suggests that such social media use can encourage narcissistic tendencies while adolescents can appear more self-assured, their self-focused tendencies and reduced self-reflective abilities can lead them to develop a fragile sense of self that requires constant external reassurance.

While risk taking is a key feature of adolescent development, Gardner and Davis (2013) argue that adolescents in the digital age are becoming more anxious about taking risks offline, such as taking a driving test, or taking interpersonal risks, through fear it will end up on their digital footprint. For digital youth, their actions have the potential to have more serious implications than pre-digital individuals, in that the consequences of their behaviour offline could be viewed on a global scale and recorded throughout their lives. While Gardner and Davis (2013) believe the internet opens up opportunities for self-expression and connecting with similar others, they fear that anxiety related to identity exploration may lead to an impoverished sense of self.

## **Methodology**

Electronic databases PsycINFO, Web of Science and Assia were searched using advanced search options. An initial broad review of the literature identified the key search terms. In order to address the overall aim of this review, and to allow for a broad search, key terms were combined with Boolean operators 'OR' and 'AND', and exploded subject headings were used. The search was limited to papers published in English, since 2006, to include research that examined social media sites that are currently relevant, as this is when Facebook use became a worldwide phenomenon, and remains the most popular site today.

### **Inclusion Criteria;**

- participants aged between 12 and 19, or average age of up to 19 years old,
- identity formation in relation to psychosocial development,
- research based on the use of social media sites as per the definition.

### **Exclusion Criteria;**

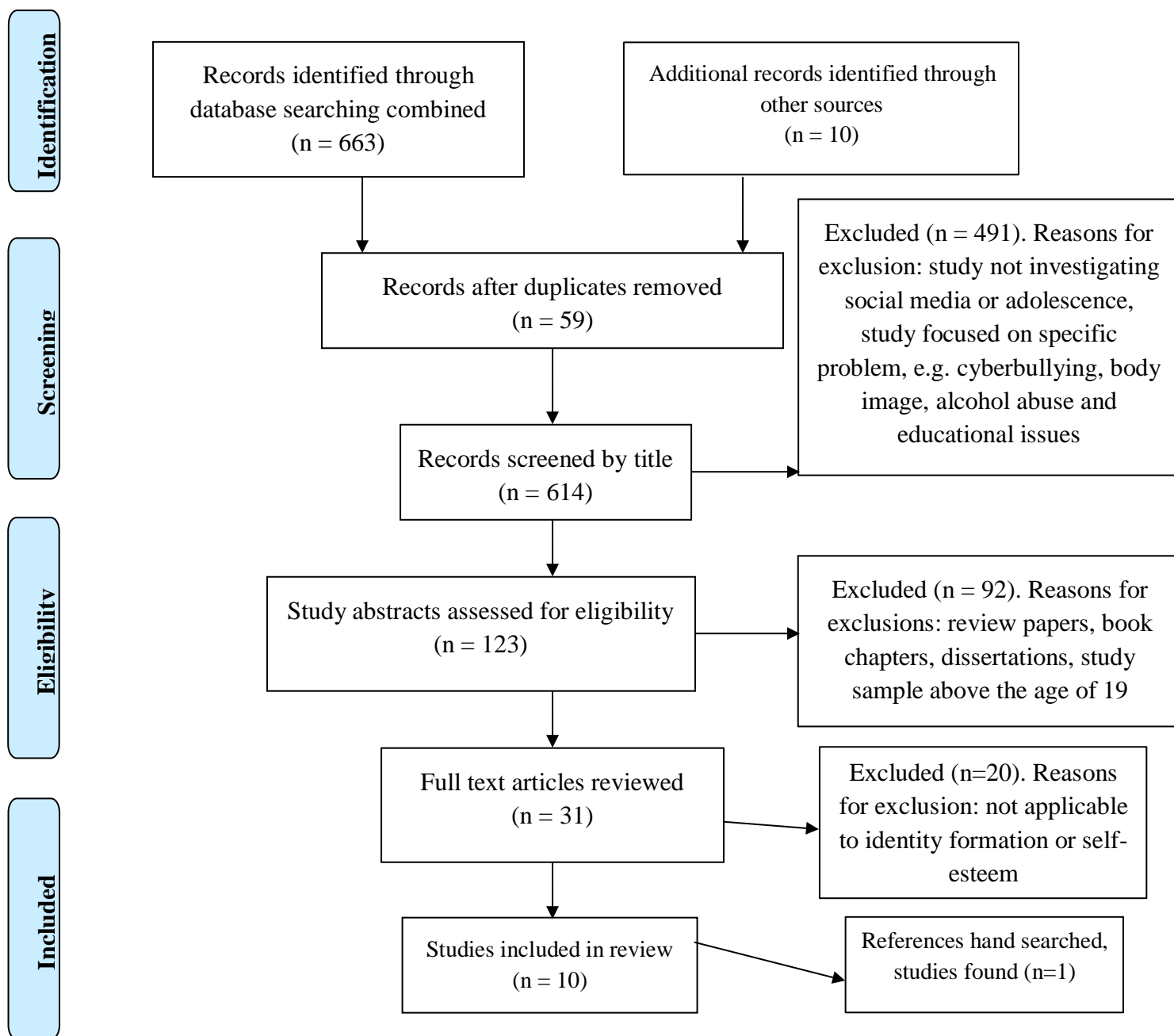
- general internet use,
- average participants' age above 19 years,
- use of specific population or group

## **Search strategy**

The following search terms were used: ("Social media" OR "social networking sites" OR blogging OR Facebook OR Twitter OR Instagram OR Snapchat) AND ("self-esteem" OR identity OR "self-concept" OR "self-presentation") AND (adolescence OR adolescent OR

teenager OR youth). Titles of studies were screened by their titles. Duplicates and studies evidently not meeting the inclusion criteria were omitted. Abstracts of the remaining studies were reviewed, then full text articles that potentially met the study criteria were retrieved and analysed further. The papers' references were hand searched for related papers not found in the electronic search, and one study was found (Vogel, Rose, Roberts, & Eckles, 2014).

**Figure 1. Prisma (2009) flow chart of paper selection**





**Table 1 Details of reviewed studies**

Study	Aims and hypotheses	Sample	Design and analysis	Measures	Key findings
<b>Valkenburg, Peter and Shoulten (2006)</b> Friend networking sites and their relationship to adolescents wellbeing and social self-esteem	Reactions of a positive tone will predict positive self-esteem and vice versa	881 Dutch adolescents aged 10-19 years old (M age=14.8) 45% boys, 55% girls who had an online profile	Online survey, correlational analysis, structural equation modelling	Frequency of reactions to profiles, tone of reactions to profiles, relationships established through CU2 (a social media site), social self-esteem using three subscales from the Harter self-perception profile, and wellbeing using the satisfaction with life scale (Diener et al).	Self-esteem was effected by tone of feedback,
<b>Livingstone (2008)</b> Taking risky opportunities in youthful content creation: teenagers use of social networking sites for intimacy, privacy and self-expression	How adolescents use online risks and opportunities in identity exploration	16 teenagers aged between 13 and 16 years old, even split between girls and boys from Greater London Area, UK	In-depth interviews, thematic analysis	Not applicable	Age difference in how identity displayed online. some disclosed more personal information than others, depending on need to connect with friends
<b>O'Dea and Campbell (2011)</b> Online social networking amongst teens: friend or foe?	Assessed the relationship between perceived social support, self-esteem and psychological distress	400 midlands UK participants mean age= 14.31 years' old	Survey data, correlational analysis	Not applicable	No significant relationship between online interaction and social support. Time spent online, negatively correlated with self-esteem and distress

<b>Davis (2011)</b> Tensions of identity in a networked era: young people perspectives on the risks and rewards of online self-expression	<p>‘How do young people conceive of identity in a networked era?’</p> <p>‘How do they navigate the tension between multiplicity and consistency suggested by the literature on identity?’</p>	24 ‘digital youth’ aged 15-25 years old (M= age 19) 13 males, 11 females	In-depth interviews, grounded theory analysis	Not applicable	Social and personal factors, namely ‘four spheres of obligations’ that restrict multiplicity includes, interpersonal relationships, online social norms, and broad community level values’ contribute to online/offline identity alignment.
<b>Davis (2012)</b> Young people’s digital lives: the impact of interpersonal relationships and digital media use of adolescent sense of identity.	Investigated the effects of interpersonal relationships and digital media use on adolescents’ sense of identity	2079 from Bermuda (57% female) aged 11 to 19 (M=15.4 years)	Survey data, structural equation modelling	Online peer communication and identity expression and exploration (Courtis, Mechant, De Marez & Verleye, 2007), mother relationship quality, friendship quality (Armsden & Greenberg, 1987), self-concept clarity (Campbell et. al. 1996)	Peer interactions were primarily positive, participants who communicated with existing friends online had higher self-concept clarity. Participants who experimented with their identity online had lower self-concept clarity
<b>Blomfield Neira &amp; Barber (2014)</b> Social networking site users: linked to adolescent’s social self-concept, self-esteem and depressed mood.	<p>‘Does social media use vary by gender? Are there differences in social self-concept, self-esteem and depressed mood for youth who have a social media profile?’</p> <p>Does frequency and investment in social media predict social self-concept, self-esteem and depressed mood?</p>	1,819 (55% female) aged 13- 17 years (M= 14.6)	Online questionnaires, regression analysis	Social media frequency scale (Lenhart & Madden, 2007), Facebook intensity scale (Ellison, Steinfield, & Lampe, 2007), adapted social self-concept scale (Marsh, 1992a,1992b, 1992c), self-esteem scale and depressed mood scale (Barber, 2006)	Negative for girls, pleasurable leisure activity for boys who had higher self-concept clarity. Social media is providing opportunities to develop social skills. Higher emotional investment, was linked to depressed mood and low self-esteem.

<b>Vogel, Rose, Roberts, Eckles (2011)</b> Social comparison, social media and self esteem	Frequent social media use linked to low self-esteem, mediated by upwards social comparison	Study 1: 145 undergraduates (106 female) from America (M= 19 years). Study 2: 128 undergraduates (98 female) (M=19)	Study 1- correlational approach. Study 2- experimental approach	Study 1: Social comparisons on Facebook and Rosenberg self-esteem scale. Study 2:	Upward social comparison significantly mediated the relationship between Facebook use and trait self-esteem. Viewing manipulated, idealised Facebook profiles was associated with poorer state self-esteem and self-evaluations
<b>Gyberg and Lunde (2015)</b> A revealing generation? Exploring the blogging of adolescent girls in Sweden.	Explored what topics adolescent girls wrote about in blogs, hypothesised this provided insight into adolescent girls' everyday lives, thoughts, emotions and how they represent themselves	204 blog entries from 34 Swedish female adolescents, aged 13 to 19 years (M= 14.8)	Content analysis of female's blogs	Not applicable	Revealed personal information, daily routines, and expressed strong emotions. Adolescents used blogging as a sounding board in their self-representations, focus on friendships and separation from parents.
<b>Woods and Scott (2016)</b> #sleepy teens: social media use in adolescence is associated with poor sleep quality, anxiety, depression and low self-esteem	Examined how social media use, including night-time specific use and emotional investment in social media related to sleep quality, self-esteem, anxiety and depression in adolescents	467 Scottish adolescents aged between 11-17 years	Regression analysis	Pittsburgh sleep quality index Buysse, Reynolds, Monk, Berman & Kupfer, 1989), The hospital anxiety and depression scale (Zigmond & Snaith, 1983), The Rosenberg self- esteem scale (Rosenberg, 1965), social media use integration scale (Jenkins-Guarnieri, Wright & Johnson, 2013). Overall and night-time specific social media use, developed by study authors	Greater social media use, night-time specific social media use and emotional investment in social media were associated with poorer sleep quality and higher levels of anxiety and depression. Specifically, overall use, night-time specific use and emotional investment were associated with lower self-esteem, and night-time specific use predicted poor sleep quality.

<b>Yang and Brown (2016)</b> Online self-presentation on Facebook and self-development during the college transition	Explored adolescents' self-presentation on social media during a transitional period and how self-presentations related to self-esteem and self-concept clarity	218 college freshmen Facebook users (55% female), mean age 18 years (no age range provided)	Survey data, multiple correlational analysis	Dimensions of Facebook self-presentation adapted (Cozby, 1973 and Wheeless, 1976, 1978), audience supported feedback, developed by authors of the study, engagement of self-reflection subscale (Grant et al 2002), Rosenberg self-esteem scale (Rosenberg, 1965), self-concept clarity scale (Campbell et al, 1996)	Self- presentation became less restricted as the semester progressed. Broad, deep, positive and authentic Facebook presentation was positively associated with perceived support from Facebook audience, contributed to self-esteem. Self-presentation increased self-reflection but lower self-concept clarity, but higher self-esteem longitudinally.
<b>Fullwood, James and Chen-Wilson (2016)</b> Self-concept clarity and online self-presentation in adolescents	Explored whether self-concept clarity was associated with adolescents' inclination to experiment with their online self-presentation	148 UK adolescents aged between 13 -18 years (M= 15.5) (88 females)	Multiple correlational analysis	self-concept clarity scale (Campbell et al, 1996), Facebook intensity scale (Ellison, Steinfield, & Lampe, 2007) and presentation of online self scale, developed by authors of the study	Individuals with low self-concept clarity were more likely to present an idealised, and diverse and inconsistent self online. Adolescents use Facebook as a tool to test out different self-presentations.

## **This review**

11 papers that explore how social media is providing a context for adolescent identity formation and the developing sense of self will be reviewed. Papers will be presented thematically in relation to their findings. Quality of the research will be critically evaluated and scored using the ‘Standard quality assessment criteria for evaluating primary research papers from a variety of fields’ (Kmet et al., 2004). A table of quality scoring for the reviewed studies is presented in the appendix.

## **Review of empirical papers**

### **Online experimentation and identity consistency**

Research is beginning to explore the processes underlying the perceived shift towards consistency between adolescent online and offline identity. Davis (2012) argued that although adolescents may benefit from exploring different aspects of themselves, this multiplicity could also pose risks to developing a consistent sense of self. The research sought to find out how adolescents navigate this dilemma between multiplicity and consistency in their everyday lives. Researchers administered a pre-interview survey to 1,686 American adolescents, and from this group identified a sub-group of high-level digital media users, including social media, who took part in in-depth interviews. This sample included 24 individuals aged 15 to 25 years old (M=19 years). The first interview explored personal experiences of digital media, followed by a dilemma interview where participants responded to two vignettes based on internet profiles that were constructed to provoke ethical dilemmas. Grounded theory analysis found that participants felt that maintaining multiple profiles online was beneficial because it allowed people to express themselves more freely in comparison to offline contexts. However, some concerns were

expressed about inconsistent expressions of identity, for example, the potential for personal harm. Participants recognised the utility of an online forum as an outlet for pent-up emotions, however they suggested that compartmentalisation of emotions by using various sites was ‘not the best way to work through them’. Participants felt that out of character conduct was unacceptable and deceitful to friends, although some allowance for differences between online and offline self-presentations were acceptable. Overall, the study found that adolescents valued the opportunity for self-expression through identity experimentation, but were mindful of potential deception of friends.

This study represented a high quality level of qualitative research; a clear objective was described and a clear connection to the wider theoretical framework was made. Data collection and analysis was described and the conclusion supported the results. However, the author did not provide a reflexive account, therefore the authors influence upon the research and data analysis is not known; Kmet (2004) score: 19/20. While Davis provided a clear rationale for conducting this study by highlighting the importance of self-coherence for psychological wellbeing, no clear definition was given of key terms such as ‘identity experiments’ or ‘multiplicity’, which could either mean adolescents pretending to be someone else, or experimenting with different aspects of the self. This could impact on understanding how adolescents are using social media to explore their identity. Furthermore, selecting high media users neglects individuals who chose not to use digital media, which could result in a potential sample bias. Furthermore, the sample’s broad age range means the results may not capture the nuanced differences in how adolescents use social media at different developmental stages. Furthermore, interviews of this kind may be subject to social desirability issues, for example participants may minimise their behaviour in order to present themselves in a positive way to the researcher, who may not know how accurate

the participant's accounts are. Conversely, drawing on two interview methods, including a hypothetical scenario, appeared to be an innovative way of gaining participant's insights.

Further research by Davis (2013), investigated the joint effects of interpersonal relationships and digital media use on adolescents' sense of identity. The study was based on the notion that interpersonal relationships contribute significantly to the adolescents' sense of identity, while digital media use may impact on how adolescents construct their identities. The study included a sample of 2,079 adolescents in Bermuda, aged between 11 and 19 years. Participants completed measures pertaining to online identity expression and exploration, mother relationship quality, friendship quality and self-concept clarity.

Using structural equation modelling, the study found that positive interpersonal relationships contributed to identity formation in adolescents, however, only maternal relationships were analysed, thus throwing into question how this conclusion was reached. The study found that online activity did not replace offline friendships, but instead solidifies them with positive effects on self-concept clarity. However, adolescents who engaged with identity experiments online were more likely to experience low levels of self-concept clarity, hypothesised to be associated with poor friendship quality. Davis suggested that the results support the self-concept fragmentation hypothesis, which states that adolescents' exposure to a diverse level of online experiences poses challenges to their ability to develop a coherent sense of self (Valkenburg & Peter, 2011).

This study also represented a high quality level of research; a clear objective was described, appropriate study design was adopted, a large sample with well described subject characteristics and established measures were used to gather data related to the study aims, Kmet (2004) score:

20/28. Davis is the first to relate her research aims to the extant literature. However, the cross-sectional study design means causal relationships cannot be identified; for instance, adolescents with low concept clarity may be more likely to experiment with their identity online, in turn contributing to identity fragmentation. Furthermore, the sample was recruited from a unique cultural and economic population where relative affluence may have contributed to the positive parent-child relationships and high levels of self-concept clarity.

Davis' research makes important contributions to the literature, by offering insight into how digital media use may provide useful opportunities for identity exploration for individuals who have secure friendships but for other, more vulnerable individuals, identity exploration online may pose too many choices, thus impacting negatively on their ability to develop a coherent sense of self (Arnett, 2002). Although social media played a significant role in the participants' digital lives, the focus of the research also included broader digital use, which was expansive and varied. Therefore, it is difficult to determine what type of digital use, and functions contributed towards the findings.

### **Identity exploration, risk and privacy**

The internet provides a rich context for adolescents to explore identity construction over the course of their development. Livingston (2008) conducted in-depth interviews with 16 teenagers aged between 13 and 16 years old, about their social media use. The interviews were free flowing and open-ended and were conducted in front of the young person's social media profile. The study aimed to find out how online risks, such as cyberbullying, and online opportunities, such as self-expression and community engagement, mediate adolescent's social networking practices. Livingston justified the aims of the research by explaining that weighing up



opportunity and risk is a key feature of adolescence in enabling young people to explore their identity and develop confidence that they are socially accepted, yet also individual and unique. The study found that adolescent expressions of identity online varied considerably. Livingston did not specify ages, but suggested that older adolescents preferred plain profiles that expressed identity through mutual construction with peers by making observable links with their friends' profiles, and by making reference to social events that occurred offline. Online activity for older adolescents focused on expressing their identity through presenting the importance of authenticity and of reciprocity of friendships. In contrast, the younger adolescents enjoyed a more elaborate profile which made a statement about their identity that aimed to gain admiration from their peers. They also found that all adolescents thought critically about others' profiles, and were aware that the information on profiles does not always reflect the individual.

Furthermore, participants were more likely to risk their privacy (such as revealing personal information) in order to gain intimacy with friends, a key feature of adolescence. Anxiety relating to this dilemma was evident in participants' responses. While they expressed concern about risk, they also expressed concern about the restrictions it placed on their ability to express themselves and connect with others. Adolescents who are driven to connect with others through identity expression, may have a naïve confidence that they know and can trust the users in their networks. Considering what is known about adolescent development, impulsivity and the disinhibition effect as naturally occurring developmental features of adolescence, these may also be playing a seminal role.

This study was one of the first to provide rich qualitative data about how adolescents weigh up opportunities and risks when expressing themselves on social media. The quality of the research was not to the standard of Davis (2010), as the authors did not provide clear a justification for

their sampling strategy or clearly describe data analysis, furthermore verification methods were not evident therefore credibility of results were not established. While the conclusions appeared to support the results well, no reflexive account was provided; Kmet (2004) score: 10/20. The extent of social media use within the sample was not stated, making it difficult to determine whether the results are transferable to other adolescent populations. Given that participants were questioned about risks; the researcher did not provide a reflexive account about how involvement in the interviews may have impacted on the participants' willingness to disclose. Conversely, observing social media profiles during the interview reduced the risk that participants' accounts of their online behaviour could differ from the reality.

This study highlighted how an adolescent's drive to connect with their peers, could potentially overshadow their judgement of the risk involved in disclosing personal information online, and remaining on their digital footprint. Although the study was the first to differentiate between how adolescents at different developmental stages may express their identity online, the age of these participants were not clear. Furthermore, although only younger adolescents stated that their motivations for social media use was to appeal to their peers, this may also apply to older adolescents who may be less willing to admit this in an interview.

Gyberg and Lunde (2015) explored the types of topics Swedish adolescent girls wrote about in their blogs, and the emotions they conveyed in their writing. The authors hypothesised that such information would provide insight into how girls represent themselves and their day-to-day lives in their blogs. The sample consisted of 34 adolescents aged between 13 and 19 years, 204 blog entries were content analysed. Results revealed that most of the bloggers divulged personal information, including names and where they lived, which the authors believed acted as identity

indicators. Furthermore, the bloggers tended to write about everyday life, including their daily routines and school. The authors suggest that more than half of the entries expressed both strong positive and negative emotions, and that the girls' were using this site as a sounding board in their self-representations, which is considered an important part of identity formation. They also suggested that writing about friends reflects the importance of peer relationships, drawing attention to the ongoing process of separation from parents and the journey to becoming an autonomous individual. The authors suggested that blogging about personal hobbies and interests was a marker of identity as it told the world about who they were as a person, and how they wanted to be perceived by others.

This study presented well designed qualitative research that was connected to a relevant body of knowledge. Data analysis was clearly described and the conclusions drawn in the study were well supported by the results, however a reflexive account was not provided; Kmet (2004) score: 18/20. Analysing blogs was a novel way of investigating how adolescents explore their identity online - a method that reduced the potential for social desirability issues, compared to interviews. However, it did not explore how this related to participants' offline worlds and the accuracy of online reporting of their day-to-day lives. Although the sample criteria were clearly defined, the authors did not justify the exclusive focus on girls, limiting the reach of the study as it failed to explore similar considerations in relation to boys.

Both Gyberg and Lunde's (2015) and Livingstone's (2008) research supported this notion that adolescents display high levels of personal information when engaging in identity expressions on blogging websites. Such findings are crucial to understanding how identity exploration on social media may pose significant risks to adolescents.

## **Social media and self-esteem**

Social media sites are constructed in a way that encourages users to comment on the appearance of others. Therefore, it is likely that, in anticipation of receiving such personal feedback, individuals are motivated to present themselves in a desirable way. Therefore, as a forum where presentations of the self overtly set out to solicit feedback from others, it is perhaps inevitable that the use of social media sites will impact on self-esteem.

Valkenburg, Peter and Schouten (2006) were the first to conduct research that investigated the relationship between social media use and self-esteem in adolescence. The study hypothesised firstly, that the tone of feedback on social media would influence self-esteem and well-being and, secondly, that social media use would encourage relationship formation and reactions to profiles. The study benefitted from a large and diverse sample of 881 Dutch adolescents aged between 10 and 19 years, who completed online surveys through a pop-up screen on their social media profile. Structural equation modelling found that social media use did encourage relationship formation, and that self-esteem was only affected by the tone of the feedback adolescents received on their social media profile. Unsurprisingly, positive feedback served to enhance self-esteem, and negative feedback served to decrease self-esteem. Given that 78% of adolescents in the sample ‘always’ or ‘mostly’ received positive feedback, social media sites may be seen as a vehicle for enhancing self-esteem.

The findings provided a rather linear and simplistic explanation of the mechanisms underlying the relationship between social media use and self-esteem. For example, it did not provide detail about the nature of the feedback and through which functions it was received (i.e. ‘likes’ or comments), or how adolescents felt about a lack of response. Furthermore, it is known that

adolescents are motivated to present a more socially desirable self online (Livingstone, 2008; Davis, 2012); thus dissonance may remain between the way adolescents actually feel about themselves and what they post. The study included a large sample size, however, subject characteristics were not fully described. Well established measures were utilised, and the results and conclusions were sufficiently described; Kmet score: 18/28.

O'Dea and Campbell (2011) hypothesised that time spent on social media would not affect social support but would be negatively related to self-esteem and psychological distress. This relationship was assessed through online surveys. Participants were recruited in the UK, and the study benefitted from a large sample of 400 participants. Although the age range was not stated, the average age was reported as 14.31 years. The findings suggested that large amounts of time spent on social media may increase psychological distress and impact negatively on self-esteem. However, the authors clearly state that a causal relationship cannot be established from these findings: adolescents with low self-esteem might have resorted to extensive social media use, or social media usage might have reduced levels of self-esteem. The study aim and design were well described and sufficient detail of the results was provided; Kmet score: 19/28.

Research has since moved towards providing a more comprehensive picture of the relationship between social media usage and self-esteem. Vogel et al., (2014) anticipated that adolescents who most frequently used Facebook would have lower levels of self-esteem, and that upward social comparison - which occurs when comparing oneself to perceive superior others who appear to have more positive characteristics - would mediate this relationship. The correlational design part of the study involved 145 American undergraduates (106 female) (M= 19 years) and the experimental part involved 128 undergraduates (98 female) (M=19). In the correlational approach, students completed measures that assessed Facebook use, self-esteem and tendency to

make upward versus downward social comparisons on the site. The experimental approach examined whether self-esteem was affected by temporary exposure to fictitious profiles that conveyed upwards or downwards social comparison. Results showed that upward social comparison had a more significant impact on self-esteem than downward comparison. The authors hypothesised that when observing someone else's profile, participants automatically attended to quantitative information such as number of 'likes', to form an impression and value judgement of the person whose profile they were viewing. Therefore, the research showed that self-esteem was improved when users viewed their own profiles, as opposed to others' profiles, where there is a risk of being exposed to upward social comparison. The authors hypothesised that viewing a personal profile allowed the user to bask in a more desirable version of themselves, by for example, reflecting on recent activities, thoughts, pictures and interactions with valued others.

The study has provided some insight into how the viewing of profiles of individuals perceived as having high social capital and more exciting lives can lead to upward social comparison, which acts as a mechanism to negatively influence adolescents' self-esteem. This was the first study to utilise an experimental design, however the generalisability of its findings are uncertain as the age range of participants was not cited and the majority of participants were female.

Furthermore, due to the cross-sectional design of the study it is unknown whether the effects were long-lasting; Kmet score: 22/28.

Research has begun to indicate a relationship between adolescent social media use and self-esteem. It suggests that the tone of feedback, upward social comparison and spending long periods of time on social media may serve as mediating factors to this relationship. Due to the correlational nature of the research, it is difficult to determine the direction of the relationship,

however it is likely that, anxious individuals with low self-esteem, spend more time on social media to strengthen self-esteem, and perhaps engage with tactical self-presentation as a way of gaining positive feedback from others. Although the feedback may serve as a temporary self-esteem boost, it may not assist in positive identity development as it is the altered self that is being affirmed, not the true self. Furthermore, anxious adolescents may be more likely to engage in upwards social comparison and are therefore more effected by the self-enhancing social media culture.

### **The effect of emotional investment in social media on mood and mental well-being**

The impact of social media on mood, and mental health in relation to self-esteem, is beginning to emerge within the literature. Blomfield Neira and Barber (2014) investigated the relationship between adolescent social media use, self-concept, self-esteem and depressed mood. The study benefitted from a large sample of 1,819 Australian students aged between 11 and 17 years. Participants completed measures based on sleep quality, anxiety and depression, self-esteem, emotional investment in social media and night-time specific social media use. A correlational analysis found that emotional investment in social media proved to be linked to lower self-esteem and higher depressed mood. They also found that social media use was more likely to be a positive leisure activity for boys who presented with higher self-concept and higher self-esteem. The authors suggest that boys are more likely to utilise social media to refine their social skills, which allows them to feel more socially competent offline. The authors also suggested that girls may be more likely to perceive feedback they receive in a negative way which, in turn, impacts negatively on their self-esteem. Interestingly, Davis (2012) suggested that boys were more likely to engage in practical online exchanges, such as discussing homework and plans to meet up, which reflects how boys' friendships tend to be more focused on concrete activities.

The authors hypothesised that social media profiles tend to reflect a type of idealised 'social resume' where adolescents display only key features of themselves that they are most satisfied with. Therefore, it may appear to adolescents that other users' lives are more exciting. The authors suggest that research has historically focused on concerns relating to the excessive amounts of time spent on social media. However, they argue that the level of emotional investment in social media is more concerning, because it renders adolescents less able to distinguish between idealised 'social resumes' presented by others, and the more mundane reality of day-to-day life. As a consequence, emotionally invested adolescents are evaluating themselves based on unrealistic comparisons, which may partly explain the link between poor self-esteem and higher depressed mood. However, this was a correlational study, therefore it is equally plausible that adolescents experiencing psychological issues spend more time on social media and are more likely to be emotionally invested. This study represented good quality research, a clear objective was described, appropriate study design was adopted, a large sample with well described subject characteristics and established measures were used to gather data related to the study aims; Kmet score:20/28.

The notion that emotional investment plays a role in problematic social media use was investigated further by Woods and Scott (2016). The study benefitted from a large sample of 467 Scottish adolescents aged between 11 and 17 years, however participant characteristics were not sufficiently described; Kmet score: 19/28. Measures of night-time social media use were completed. A regression analysis found that higher levels of social media use at night time, and emotional investment in social media, were related to poor levels of sleep quality, and increased levels of anxiety and depression. They also found that lower self-esteem in particular was related to emotional investment and night-time social media use. The authors hypothesised that high



emotional investment in social media leads to upward social comparison on the sites (Vogel et al., 2014).

Similar to the majority of research in this area, the studies explore correlational relationships and, therefore, caution needs to be taken when inferring the results. The concept of emotional investment as a potential mechanism underlying the link between social media use and psychological wellbeing is a key finding that requires further investigation. For example, while adolescents may know on an intellectual level about the idealised nature of the ‘Facebook resume’ on social media, it may still have a profound emotional impact on them; perhaps particularly for individuals who are emotionally vulnerable, either through low self-esteem or other mental health issues.

### **Self-presentation**

Yang and Brown (2016) hypothesised that reactions from others on social media sites impact on an individual’s sense of self, and therefore, adolescents may adjust their self-presentation in order to solicit such feedback. They define self-presentation as ‘the process through which individuals communicate an image of themselves to others, which is a central element in the construction one’s self and efforts to establish reputation within a societal context’ (Yang & Brown, 2016). The study focused on how students used social media to present themselves during transition to a new college, and how others’ reactions contributed to self-esteem and self-concept clarity. 218 adolescents, with an average age of 18 years, completed pre- measures when they began college and again at follow-up, four months later. The study found that participants became more relaxed and less guarded in their presentation as the semester progressed.

Participants reported being intentional about self-presentation at both time points, which suggested careful thought being given to contextual norms and self-presentation goals, reflecting their need to make themselves socially attractive to their new peer group when feeling unsure about how accepting the group would be. Despite careful manipulation of social media profiles, adolescents reported that their self-presentation was authentic at both time points, suggesting they were not concerned that being selective in self-presentation compromised authenticity. Results were sufficiently described and showed that participants presented with stable levels of self-esteem across the two time points, suggesting that the tendency to post positively lead to them receiving many reassuring comments or 'likes', resulting in a self-esteem boosting experience.

Authors warn that adolescents may use social media to escape thinking about the reasons underlying their low self-esteem, which may not be a useful way to address issues of self-esteem (Harter, 2012). Instead, they may use the sites to superficially enhance self-esteem. This study is unique in its attempts to assess changes in social media use on a longitudinal basis; however, it is based on a very specific transition of moving to independent living. Plus, the age range of participants was not provided, making it difficult to generalise the results; Kmet (2004) score: 19/28. Furthermore, the study does not provide information about how adolescents perceive negative feedback, or absence of feedback.

Similarly, Fullwood, James, & Chen-Wilson (2016) investigated whether self-concept clarity predicted adolescent online self-presentation behaviour. A large sample of 148 UK participants aged between 13 and 18 years, completed well established measures that assessed self-concept clarity, Facebook use, and presentation of online self behaviours. Results were clearly described

and showed that participants with low self-concept clarity were more likely to present an idealised self that was inconsistent with their offline self. The authors suggest that adolescents with low concept clarity use social media to experiment with different versions of the self as a form of self-discovery, as they attempt to understand who they are. They may present an ‘ideal self’ online in an attempt to boost popularity and gain positive feedback. The findings of the results remain tentative due to the correlational design of the research. It does, however, highlight that adolescents use social media as a tool to test out self-presentations and that self-concept clarity is a good predictor of self-presentation experiments online; Kmet (2004) score 20/28.

Research examining links between self-presentation, self-esteem and self-concept clarity is in its infancy, however this is an important notion that warrants further investigation. Although adolescents utilise self-presentation to evoke positive responses from their social networks to boost their self-esteem, it may in fact may be harming their developing sense of self.

## **Discussion**

This review explored the current literature focusing on adolescent identity exploration on social media. The literature indicates that online and offline lives have become inextricably intertwined and that while social media can provide valuable opportunities for adolescent identity exploration (Livingston, 2008; Davis, 2012), it can also have a significant impact on identity formation and may be placing adolescents at risk.

The research reviewed confirms Erikson's (1968) core tenets that identity and autonomy are central to adolescent development, and it is beginning to demonstrate that social media is providing a new and challenging platform for identity exploration. Social media is a very seductive new tool for young people, with potentially global consequences if not managed wisely, which has the potential to be problematic for impulsive young people. The research findings suggest that emotional investment, tone of feedback, upward social comparison and spending excessive amounts of time on social media could potentially serve as mediating factors underlying the relationship between low self-esteem, identity confusion and social media use. The majority of papers utilised correlational methods, and therefore causal relationships and long term effects cannot be established. However, given that identity theories stipulate that identity coherence is a key task in adolescence (Erikson, 1968; Marcia, 1980), it can be hypothesised that anxious individuals experiencing low self-concept clarity and identity confusion may spend more time on social media experimenting with their identity in an attempt to manage their psychological distress. This may include using self-presentation strategies, such as presenting an idealised self, in order to gain positive feedback from others. Although the feedback may seemingly serve to increase self-esteem, it may not be helpful with identity clarification, because it is the idealised version of themselves that receives validation from others, leaving them feeling unsure about who they are, thus increasing emotional dissonance. According to Marcia's (1980) theory of identity development, this lack of genuine identity exploration could lead to identity diffusion, and in turn decrease self-esteem (Kroger, 2008). Furthermore, vulnerable adolescents may be more likely to become emotionally invested in the sites, and reliant on them to regulate their emotions, rendering them less able to critically assess

others' 'Facebook resumes', thus in turn engaging in upwards social comparison and decreasing self-esteem.

Erikson (1968) identified that identity exploration in adolescence involves an increased preoccupation with peer relationships. Current research recognises that adolescents need to connect with their peers plays a key role in weighing up risk when making decisions about online behaviour, which may lead adolescents to engage in potentially dangerous behaviour online, such as sharing personal information to an extensive, unknown network of people (Livingstone, 2008; Gyberg & Lunde. 2015). However, taking the extant literature into account, it could also be hypothesised that increased levels of impulsivity and low levels of self-regulatory capacity, coupled with the disinhibition effect as naturally occurring developmental features of adolescence, may also be playing an influential role.

#### Research critique

Overall, the majority of the research discussed, utilised correlational methods based on quantitative analysis of self-report data, suggesting that the research is currently at an exploratory level. This review included eight quantitative research studies that scored between 18 and 22 of a possible 28 on the Kmet (2004) quality assessment criteria. The majority of points were lost in relation to interventional blinding, random allocation and control for confounding variables because the studies were not experimentally based. Although all the studies included appropriate sample sizes, participant characteristics were not fully described in four of the studies, meaning it is difficult to characterise the population that was included in the research, and conclude on the generalizability of the results. Three of the studies included in this review were of a qualitative nature, scoring between 13 and 18 on the Kmet (2004) quality

assessment criteria. No evidence of reflexivity was provided for the qualitative studies, meaning no assessment of how the authors own personal characteristics were considered, and how this may have influenced the data analysis and study findings. Although in its infancy, current research demonstrates well designed quantitative studies that have used valid and reliable measures, which have contributed to a developing evidence base. However, to date, no randomised control trials, which are considered to be the gold standard research design, has been conducted. This means that firm conclusions about the impact of social media on young people's identity formation and self-esteem cannot be made. Furthermore, qualitative research is significantly lacking in this area, therefore limited information about what young people make of their social media use is available. Research within this domain that included emerging adults was not considered within this review given their differing developmental profile. Inconsistency in relation to the conceptualisation of adolescence exists within the literature, therefore this review followed a strict age criteria in order to focus on the age group where identity formation is central and where young people are most vulnerable to the contexts around them. While the current research benefitted from large sample sizes, the majority of studies included biased samples in terms of participant characteristics, and social media use, making it difficult to generalise the results to the UK population. Furthermore, studies with an average age of 19 years, included some participants well above the age of 19. No research to date has sought to differentiate between differing phases of adolescence development.

#### Implications for clinical practice

Although social media provides positive experiences for identity exploration, these may be outweighed for anxious individuals who may not benefit in the way that well-adjusted young people may do. Given that identity distress and issues with low self-esteem are strongly linked to

mental health issues (Trzesniewski et al., 2006; Samuolis, Barcellos, LaFlam, Belson, & Berard, 2015), the way in which social media use may be exacerbating psychological issues needs to be considered. While some age- appropriate mental health support is available online ([http://www.youngminds.org.uk/news/blog/3238\\_reaching\\_out\\_digitally\\_teens\\_technology\\_and\\_mental\\_health\\_training](http://www.youngminds.org.uk/news/blog/3238_reaching_out_digitally_teens_technology_and_mental_health_training)), harmful sites such as ‘pro-ana’ websites, which encourage eating disorders, are deeply concerning given the relatively unsupervised world of the internet.

Currently no research exists in relation to how individuals within the clinical population use social media, and it is these individuals who may be more vulnerable to the effects discussed in this review. Clinicians need to be aware that an adolescent’s desire to connect with peers and naivety about the safety of social media, may lead them to placing themselves significantly at risk online. Clinicians can play a role in supporting adolescents to learn about and feel confident to negotiate boundaries of privacy online, while being able to take risks on and offline in a way that does not leave them vulnerable to the devastating consequences that are possible in the digital age, such as cyberbullying and unauthorised sharing of personal content. It is a reality that many child healthcare professionals, did not grow up surrounded by social media as the youth of today have, and may lack confidence in approaching this subject area within clinical practice with adolescents. Furthermore, the rapid development of technology and the way it is used by adolescents further adds to this divide.

#### Questions for future research

Limited research within the age group of 12 to 19 exists in the area of social media, perhaps because the level of social media involvement within this age group is a relatively new phenomenon. Furthermore, little is known about the differences between age and gender and

how this impacts on identity formation on social media, although as this review highlights, this is beginning to emerge. The majority of existing research within this subject area is grounded in correlational research. Therefore, there is a clear need for both longitudinal and qualitative research methods that consider the adolescents' perspective. Indeed, many of the authors reviewed suggested that qualitative research would provide more in-depth understanding about views of the self in relation to social media. Research has indicated that adolescents explore their identities online, and that the use of self-presentation may serve as a strategy to manage, however little is known about the motivations underlying discrete social media activities and the decision-making process that underlies this. Also, it has not indicated how they manage feelings evoked by social media use, and what strategies they use.

Research methods that appear effective with this population group have been indirect approaches that take into account the adolescent level of cognitive and emotional functioning, while not relying solely on self-report due to the potential for social desirability biases. Overall, the findings within this research have been informative in terms of considering aspects of identity formation, however to date, research has not been grounded within explicit theoretical, developmental frameworks. Additionally, research has not considered how individuals within the clinical population use social media to explore their identity online.



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## Appendix

'Standard quality assessment criteria for evaluating primary research papers from a variety of fields' (Kmet, 2004).

<b>Quantitative Quality criteria</b>	<b>Study: Valkenburg, Peter &amp; Shoulten (2006)</b>	<b>Study: O'Dea &amp; Campbell (2011)</b>	<b>Study: Davis (2012)</b>	<b>Study: Blomfield Neira &amp; Barber (2014)</b>	<b>Study: Vogel, Rose, Woods &amp; Roberts, &amp; Eckles (2011)</b>	<b>Study: Woods &amp; Scott (2016)</b>	<b>Study: Yang &amp; Brown (2016)</b>	<b>Study: Fullwood, James and Chen- Wilson (2016)</b>
Question / objective sufficiently described?	2	2	2	2	2	2	2	2
Study design evident and appropriate?	1	2	2	2	2	2	2	2
Source of information/input variable described and appropriate?	2	2	2	2	2	2	2	2
Subject characteristic sufficiently described?	1	1	2	2	2	1	1	2

If interventional and random allocation was possible, was it described?	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
If interventional and blinding of investigators was possible, was it reported?	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
If interventional and blinding of subjects was possible, was it reported?	N/A	N/A	N/A	N/A	2	N/A	N/A	N/A
Outcome and exposure measure(s) well defined and robust to measurement/misclarification bias? Means of assessment reported?	2	1	2	2	2	2	2	2



Sample size appropriate?	2	2	2	2	2	2	2	2
Analytic method described/ justified and appropriate?	2	2	2	2	2	2	2	2
Some estimate of variance is reported for the main results?	2	2	2	2	2	2	2	2
Controlled for confounding?	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Results reported in sufficient detail?	2	2	2	2	2	2	2	2
Conclusions supported by the results?	2	2	2	2	2	2	2	2
<b>Total score (out of 24)</b>	<b>18</b>	<b>18</b>	<b>20</b>	<b>20</b>	<b>22 (out of 26)</b>	<b>19</b>	<b>19</b>	<b>20</b>

Qualitative Quality criteria	Study: Livingstone (2008)	Study: Davis (2011)	Study: Gyberg and Lunde (2015)
Question / objective sufficiently described?	2	2	2
Study design evident and appropriate?	2	2	2
Context for the study is clear?	2	2	2
Connection to a theoretical framework / wider body of knowledge?	2	2	2
Sampling strategy described, relevant and justified?	1	2	1
Data collection methods clearly described and systematic?	1	2	2
Data analysis clearly described and systematic?	1	2	2
Use of verification procedures to establish credibility?	0	2	2
Conclusion supported by results?	2	2	2
Reflexivity of the account?	0	1	1
<b>Total score (out of 20)</b>	<b>13</b>	<b>19</b>	<b>18</b>

APRIL S. WARD BSc Hons

Section B:

How is social media use impacting on adolescent identity formation and their developing self-esteem? A thematic analysis

Word Count: 7,994 (475)

A thesis submitted in partial fulfilment of the requirements of  
Canterbury Christ Church University for the degree of  
Doctor of Clinical Psychology

APRIL 2017

SALOMONS

CANTERBURY CHRIST CHURCH UNIVERSITY

### **Abstract**

**Objective:** To understand how adolescent social media use is impacting on young people's identity formation and developing self-esteem. Degree of emotional investment in the sites is examined, and what motivations underlie discreet social media activities. It also aims to investigate adolescent responses to online feedback and their coping strategies in relation to the feedback.

**Method:** In-depth interviews with 15 white British adolescents aged 12-17 years (9 females, 6 males) consisting of four single sex friendships groups, were thematically analysed. Each group took part in a facilitated focus group, and an unaccompanied focus group and an individual interview with the lead researcher.

**Results:** Five key themes were identified: investment, feelings evoked by social media, motivations, observations of social media norms, and strategies to manage feelings evoked by social media.

**Conclusion:** while social media is providing an important new context for identity formation, it may be placing additional pressures on adolescent development. Digital youth feared receiving critical feedback online, due to the potential for experiences of shame to be projected widely. They were highly attuned to the quantifiable feedback they received online and felt pressured to be effortful in their social media activity. This could impact negatively on adolescents' ability to develop a coherent and stable self (Erikson, 1968), particularly for those with pre-existing mental health difficulties. A curious and non-judgemental approach to understanding how adolescents use social media, is necessary in order to encourage supportive conversations.

**Keywords:** Adolescence, social media, identity, self-esteem, adolescent development

## **Introduction**

Since its inception in 2005, social media has revolutionised communication and become an integral part of adolescents' lives. By the age of 15, 89% of young people in the UK have a social media profile (Ofcom, 2016) and 56% of teenagers spend up to three hours per day on social media (ONS, 2015). The use of mobile devices means that adolescents can be connected to their social world on a 24-hour basis. The sites provide a plethora of tools for adolescent identity exploration, which is a fundamental task of adolescent development.

### **Identity formation in adolescence**

Identity and its formation is a complex concept to define. Approaches in the literature take two key positions (Cote & Levine, 2014). Firstly according to Erikson (1968), adolescence is a time of exploring social roles and values before committing and internalising them into a coherent sense of self. Secondly, literature on the development of the self suggests that it is an ongoing conscious process of reflection of how one is perceived by others (Cote & Levine, 2014). Arguably, social media now provides an important new social context within which identity formation can occur.

### **Adolescent development and social media use**

Adolescence is a period of rapid development, both physically and emotionally.

Advances in neuroscience have revealed that the mesolimbic dopamine pathways, also known as the reward systems in the brain, develop faster than the pre-frontal cortex, which controls the regulation of emotions and behaviour. This means that adolescents have limited capacity to assess risks and the consequences of their actions at a time

when the drive for new and exciting experience is high (Romer, 2010). It is therefore unsurprising that adolescents are attracted to the myriad of novel experiences and risk-taking opportunities made available by digital media. However, with this brings significant concern about excessive digital media use and their ability to comprehend the potential risks and consequences of online behaviour (Wu et al., 2013). This concern is exacerbated by 'the disinhibition effect', defined as the feeling when social restrictions, typically found in offline communication, are removed thus giving people the courage to behave in ways online they would not feel able to offline (Suler, 2004). Although this applies equally to individuals of all ages, it is argued that adolescents may be less likely to consider and understand the full consequences of their behaviour online (Valkenburg & Peter, 2011). For example, the ramifications of teenage 'sexting', and the sharing of sexually explicit content, have the potential for significant social and emotional harm, especially if the content falls into untrustworthy hands. Not only is there potential for the content to be widely shared, it could also remain on their digital footprint (O'Keeffe & Clarke-Pearson, 2011b).

Furthermore, social media provides a context that is essentially inaccessible to adults, which is particularly attractive to adolescents who are striving for independence and autonomy from parental figures and whose friendships assume central importance (Music, 2010). Gardner and Davis (2013) argue that being constantly connected to others, reduces adolescents' ability to form an autonomous sense of self. They suggest that digital youth automatically look for external reassurance for even mundane matters, rather than developing trust in their own capacity to make thoughtful decisions. Gardner and Davis' (2013) also observed that adolescents develop a 'Packaged self' whereby they create an idealised online identity for their social media audience, which they then feel

pressurised to maintain offline. This can lead to them avoiding experiences offline that could potentially result in failure (such as taking a driving test), through fear that the failure will become part of their digital footprint, and in turn jeopardize their 'packaged self'.

The current literature

While social media can provide useful opportunities for identity exploration, research suggests that this may only apply to individuals with secure interpersonal relationships (Davis, 2013). For more vulnerable individuals, online identity exploration may pose too many choices, thus impacting negatively on their ability to develop a coherent sense of self (Arnett, 2002). Research suggests that the tone of feedback from peers (Valkenburg et al., 2006), upward social comparison (Vogel et al., 2014) and spending long periods of time on social media (O'Dea & Campbell, 2011) may serve as mediating factors between social media use and adolescent self-esteem. Although research within this domain is currently exploratory and firm conclusions cannot be made, it is likely that anxious individuals with low self-esteem may spend more time on social media to strengthen self-esteem, and engage with tactical self-presentation strategies as a way of gaining positive feedback from peers in order to boost self-esteem (Fullwood et al., 2016). However, such strategies may not assist in secure positive identity development as it is the idealised self that is being validated, not the authentic self. Furthermore, these strategies may only temporarily boost self-esteem, meaning the adolescent avoids thinking about the reasons underlying their low self-esteem, which are left unaddressed (Harter, 2012).

Blomfield Neira & Barber (2014) suggest that greater emotional investment in social media predicted lower self-esteem and higher depressed mood. They suggest that adolescents with low self-esteem may be more likely to engage in upwards social comparison and are therefore more affected by the self-enhancing social media culture. Beyens, Frison, & Eggermont (2016) found that adolescents' social needs for popularity and belonging, or 'FoMO' (the fear of missing out), increases Facebook use and stress related to concerns that they do not belong. This study found that receiving feedback online and not receiving feedback can be equally stressful for adolescents who are highly dependent on feedback from their peers. They suggest that the stress of 'FoMO' may impact on adolescent wellbeing through, for example, sleep loss. This is particularly concerning given that research has indicated night time social media use is linked to poor levels of sleep quality, and increased levels of anxiety and depression (Woods & Scott, 2016).

Historically, research has been primarily concerned with the frequency and quantity of social media use, however, research is beginning to recognise that more needs to be known about the motivations underlying discrete social media usage. La Sala, Skues, Wise, and Theilers (2014) found that adolescents carefully consider their social media posts because they provided an accurate reflection of their self, meaning that 'likes' were internalised 'as a measure of popularity, self-worth and acceptance from peers'. Overall, social media use may in fact potentially be damaging to adolescents' developing self and their sense of wellbeing, particularly for individuals who are emotionally vulnerable, either through low self-esteem or other mental health issues.



## The current project

Best, Manktelow and Taylor (2014) suggested that research findings vary over the links between intensity of social media use and its impact on self-esteem and depression, plus evidence surrounding the harmfulness and benefits of social media use is contradictory (Taylor et. al. 2014). It could be argued that attempting to characterise social media use as solely good or bad, provides little understanding about adolescents' social media practices. For these reasons, this study will explore motivations underlying social media use and what it means to adolescents' developing self, through gaining the adolescents' point of view. To date there is no research that demonstrates what adolescents do to cope with negative social media experiences or, equally, what techniques they adopt to mitigate negative experiences and to preserve self-esteem. Nor has research made links between the theoretical understandings of identity formation and the role that social media may play in its development. This study, therefore, seeks to examine the potential implications of social media use in adolescent development, and make tentative observations about its contribution to established conceptual understandings of identity formation in adolescence. Understanding this phenomenon could be seminally important in helping healthcare professionals to understand the impact of social media use when working with adolescents within clinical settings.

## Research questions

- How invested are young people in social media?
- What are their motivations in using different social media sites and their different functions?

- What do young people make of the online feedback (or lack thereof) that they receive regarding their social media activities?
- How does this leave them feeling and what do they do to cope with the feedback they receive (or lack thereof)?
- What are the implications of adolescent social media use on adolescents' emerging identity development and what does this add to our conceptual understanding?

## **Methodology**

### **Design and procedure**

A qualitative design was utilised in order to delineate the complexities involved in how social media use influences adolescents' views of themselves and their developing identity. This suited the adoption of a critical realist epistemological stance, which makes positivist assumptions about an objective reality independent of human consciousness, whilst acknowledging that our understanding of this is socially constructed (Maxwell, 2012). Therefore, within the present study, the researcher adopted the perspective that objective factors about social media exist, but that participants' cultural and social contexts influence how they make sense of their experiences of using social media (Willig, 2013).

The study adapted a novel research method previously used by Ofcom (2014), which involved triangulating data between three sources:

- 1) Focus group with the interviewer: aimed to gain general views on presentation of self on social media and how this was negotiated and communicated in a peer group.
- 2) Group task without interviewer: Participants were left alone and given instructions to complete a task (appendix 1). Questions aimed to gain participants' views on teenage social media use from a public perspective, which allowed participants to discuss their ideas from a less personalised perspective, and without an adult present, in order to facilitate a more candid conversation between friends.
- 3) Individual interviews: Personal views on their social media use were gained through a semi-structured interview while simultaneously visiting their social media profiles.

Ofcom (2014) found that participants disclosed varying aspects of their behaviour across the different conditions. Therefore, similar to Ofcom (2014), this study also employed methods of gaining data from within both individual and group contexts, to understand how peer groups influenced responses. The triangulation-based approach meant participants could report on the behaviour of their friends as well as their own. Given that it is common for adolescents to feel defensive about their social media use, it was important that this study utilised creative ways of accessing their views, using a previously successfully adopted method.

An exploratory and flexible semi-structured interview was utilised in a way that could be adapted as novel or interesting data arose. The interview schedule addressed questions relating to self-esteem, identity formation and emotional investment (appendix 2). A pilot interview was carried out with an adolescent who was unrelated

to the project to ensure that the questions were suitable, and adjustments were made accordingly. Each interview was recorded with a Dictaphone and lasted between 20 to 30 minutes.

## Measure

‘The Facebook Intensity scale’(Ellison et al., 2007) included self-report questions measuring; time spent on social media, and number of ‘friends’, in order to measure the extent of participant use of the sites. Likert scale attitudinal questions assessed the extent of emotional connection to social media (how much they value and rely on their social media), and whether it is assimilated into daily activities. ‘Facebook’ was replaced with ‘social media’ in order to capture use across sites (appendix 3). Norms do not currently exist for this measure, therefore comparisons between the study samples’ social media use and the general population cannot be made. However, it allowed for average scores to be compared within the study sample.

## Recruitment

Due to limited research within this subject area, the study aimed to recruit a diverse sample that represented both genders and a clearly defined conceptual age range of adolescence in order to gain a general overview of adolescent social media use. The study recruited schools known to the research team through social and professional networks, and schools were invited to take part via email. Schools were offered a training session on adolescent social media use as an incentive for taking part. From the 14 contacted schools, one school was willing to take part.

A recruitment presentation was conducted during a school assembly by the lead researcher. An estimated 100 students aged between 12 to 18 years were present. Students with at least one social media profile were invited to take part. After indicating their interest in volunteering, each student was given consent forms and an information sheet about the study (appendix 4). Students were asked to return the completed consent forms to their teacher once parental consent had been sought.

### Participants

The number of participants included in this study was in line with previously published qualitative research in the area (Livingstone, 2008). Furthermore, Guest, Bunce, & Johnson (2006) suggest that the generation of new themes reduces after 12 interviews, when conducted with a homogenous sample taking part in a relatively structured and focused interview.

The secondary school was based in the South of England. A total of 47 students (18 boys, 29 girls), aged between 11 and 18 ( $M = 13.4$ ,  $SD = 1.7$ ) forming 14 friendship groups expressed an interest in taking part (Table 1). Of these, 11 students, consisting of three friendship groups returned consent forms and took part (see table). Another group of three 12-year-old females also returned consent forms but they were not chosen to take part in the study as 12-year-old females were already represented in the sample. In order to gain a diverse sample in terms of age and gender, a friendship group consisting of four, 16-year-old girls, were recruited through the lead researcher's social network. Consent for this latter method of recruitment was sought and given from the Salomons ethics panel. All participants were white British.

Table 1. Participant demographics and social media use

Participant	Age (years)	Gender	Average emotional connection score	Total social media friends	Time per day (minutes)
1	12	Female	3.2	301–400	30
2	12	Female	3	101–150	30
3	12	Female	3.8	> 400	60
4	12	Female	3.7	101–150	60
5	12	Female	3.5	11–50	60
6	17	Male	3	151–200	60
7	17	Male	3.3	151–200	90
8	17	Male	3.3	151–200	300
9	14	Male	3.7	151–200	240
10	14	Male	2	51–100	30
11	14	Male	2.7	51–100	10
12	16	Female	4.2	> 400	360
13	16	Female	4	> 400	300
14	16	Female	4.3	> 400	330
15	16	Female	4.3	> 400	420

#### Data analysis

The critical realist stance taken in this study meant that the data was not analysed purely at an objective surface level; rather some deeper interpretation of the underlying psychological mechanisms of participants' responses was made, based on their individual and contextual factors (Willig, 2013). Thematic analysis is appropriate to this epistemological position (Braun & Clarke, 2006). An inductive thematic data

analysis was conducted, meaning no existing coding frame was considered and codes were generated directly from the data (Braun & Clarke, 2006). However, as the researcher had immersed herself in the related literature, analysis was likely to have been influenced by the researcher's prior knowledge of the subject area, and therefore to state that the analysis was purely inductive may not be realistic. Thematic analysis seeks to identify meaningful patterns in qualitative data and interprets aspects of the research area (Boyatzis, 1998). This provides opportunities for interesting patterns to be identified within the study sample and across conditions. The method was informed by Braun & Clarke's (2006, 2013) six step guide:

- 1) Familiarisation with the data: listening to and transcribing the interview recordings, followed by immersion in the data via repeated reading of transcripts and 'active reading' of the data and noting areas of interest.
- 2) Initial codes generated: transcripts systematically analysed manually, line-by-line; descriptive or interpretive codes were noted on the transcripts.
- 3) Themes searched for: codes were analysed and broad themes significant to the research question and patterns of meaning within the data were identified.
- 4) Themes reviewed: Refinement of themes involved discarding broad themes that contained insufficient data. Themes were checked against the entire data set and then between conditions to notice patterns. This was to ascertain whether sufficient data in the transcripts supported the theme and that the themes related to each other meaningfully, while being distinctly different from each other.
- 5) Themes named and defined
- 6) The report was produced: a detailed analysis was composed for each theme.

The data was triangulated from all three sources, individual, researcher- led group and peer-led group and themes were created across conditions using this analysis framework. The triangulation approach was utilised in order to gain a richer understanding of the young people's views, and from different perspectives. This approach helped to identify of how young people socially construct their social media use and how they position themselves in relation to their peers (Willig, 2013). Convergence of results across conditions, as well as disparities across the conditions will be discussed.

#### Ethical considerations

Ethical approval was granted by the Salomons Centre for Applied Psychology Ethics Panel. For participants aged under 16 years old, consent was obtained from both the participant and their legal guardian, as this is a legal requirement. Consent was sought directly from those who were over the age of 16 years.

#### Quality assurance checks

An established thematic analysis method was adhered to (Braun & Clarke, 2006).

Data source triangulation: validity of the data was tested through convergence of information from different sources (Carter, Bryant-Lukosius, DiCenso, Blythe, & Neville, 2014) Reflexivity: I was aware that I did not 'grow up' immersed in the sites throughout my adolescent years. For this reason, I explored my experiences of social media in peer and formal supervision, and sought to remain curious about the presence of growing up with the sites during adolescence. I kept a research diary (appendix 4) to note what surprised me and what challenged my assumptions.



Inter-rater: final themes and quotes were discussed and checked with supervisors and an external consultant.

## Results

Facebook, Instagram, Twitter and Snapchat were the most frequently used sites identified by this sample. The 16-year-old female reported to be the most emotionally connected in the sites in the sample ( $M=4-4.3$ ), followed by the 12-year-old girls ( $M=3-3.8$ ), even though they spent the least amount of time on the sites, which may be due to parental restrictions. The boys reported being the least emotionally connected in the sites ( $M=2-3.7$ ), even though some of the male participants spent more time on the sites than 12-year-old female participants. A total of five main themes and 16 subthemes were identified (Table 2). Quotes from interview transcripts have been included to provide examples from of the themes and codes. Identifying information has been removed. Participants were not individually identified in the group conditions as this was not possible from the recordings. Participants' individual interview transcripts have been identified by number (e.g. P1: 14= participant 1, individual interview). The origin of quotes from group conditions have been indicated with an acronym (e.g. GWI: boys, 13), refers to 13-yearold boys group with interviewer; GWOI indicates group without interviewer.

Table 2. Themes and subthemes

Key Theme	Subordinate Codes
1. Investment	<p>1.1 practical issues related to living without social media</p> <p>1.2 feelings associated to living without social media</p> <p>1.3 pressures of social media involvement</p> <p>1.4 night time social media use</p>
2. Feelings evoked by social media use	<p>2.1 Feelings evoked by reactions to posts</p> <p>2.2 Feelings about lack of reactions to posts</p> <p>2.3 Jealousy and envy</p> <p>2.4 Fear of judgement from others</p>
3. Motivations underlying social media activities	<p>3.1 posting on social media</p> <p>3.2 self-presentation and impression management</p> <p>3.3 aspects of myself I do not want on social media</p>
4. Observations of social media cultures and 'rules'	<p>4.1 observations of social media cultures and 'rules',</p> <p>4.2 things other people do on social media</p> <p>4.3 disinhibition effect</p>

5. Strategies to manage feelings evoked by social media use	5.1 practical strategies  5.2 critical thinking
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## **1. Investment**

Scores from the measure showed that the 16-year-old female participants were the most emotionally invested in social media and spent the most time on the sites. All participants reported that without social media they would be bored and would have difficulty organising social events. While boys mainly highlighted practical issues, girls' responses explicitly acknowledged the emotional impact too, for example, that they would feel sad, lonely, and worried about being left out of friendship groups. Girls displayed agonising the most about the importance of social media in their lives, and expressed frustration about the pressures of being involved in the social media community. Some suggested that they would like to give up social media but fear feeling left out, and concerned about the attention it would draw to them for not having a social media profile. The boys described being emotionally unaffected by social media; instead, concerns about living without social media related to practical inconveniences around organising social events and the potential for boredom. However, boys were able to recognise that other adolescents might feel disconnected and concerned about friendships without social media. 'Banter' about being emotionally affected by the sites was observed in male groups, for example one of the boys was made fun of for buying 'likes' in order to appear popular. This theme consisted of four subthemes.

1.1 Practical issues related to living without social media- pertaining to boredom and issues with organising social events.

- GWI (female, 16): “out the loop because we have a group Snapchat that is so long, if you don't reply for a day then you could miss up to 200 Snapchats”
- P8: (male, 17): “I talk to people on it every day usually, I get messages, if I didn't use it for a day I wouldn't be worried, or worried about what I've missed, unless someone messages me asking something and I didn't reply but again. But sometimes if I'm busy I do not go on it, if I get a thing I ignore it, but it's just useful to have”

1.2 Feelings associated with living without social media- Boys described being ‘OK’ about life without social media, whereas girls described that they would feel lonely, disconnected and anxious about the impact on friendships.

- P1 (female, 12): “I would probably be okay with it but if nobody knew I would feel a bit anxious just in case people thought I couldn't be bothered or that I’m lazy or boring”
- P10 (male, 14): “fine, I'm not addicted and I'm not attached so I can leave it alone, but when I get back I do like to go through and see what I've missed”
- GWF (male, 17): “I wouldn't feel like, oh no I'm not in touch with all the big news is happening, I don't really care about what's happening”

1.3 Pressures of social media involvement-boys did not feel pressured about staying connected to their social media community, whereas girls described that the pressure to keep up with messages and put effort into their social media was stressful. Some of the older female participants described wishing they did not feel so pressured by social media.

- GWI (female, 12): “social media used to be a fun thing where you could just go on there to talk to your friends, see what your friends are doing when you not with them, now it's serious”
- P12 (female, 16): “talking to people on Snapchat it can be quite a stressful thing, well not stressful but a lot of thought goes into trying to keep conversations up with people”
- P8 (male, 17): “I don't want to share all those photos with everyone, I'm not too bothered”

1.4 Night time social media use- Parental restrictions on younger participants meant they did not have their phones with them at night. Older participants reported being able to stop their social media use at night, however that it can be difficult at times.

- P14 (female, 14): “it would be nice, and before I go to bed it would be nice to just not have it but I like to be in contact with people, it's a nice feeling knowing that people want to talk to you”

## **2. Feelings evoked by social media use**

All participants described being concerned that they could be judged critically by others during individual interviews and girls appeared to agonise about this much more. Interestingly, this topic was only discussed in individual interviews, and briefly mentioned by younger female participants in the group discussion with the interviewer present. This finding suggests that adolescents do not disclose fears about being judged to their peers and therefore adolescents presume others are seemingly confident in their social media expression, which could perpetuate adolescents' anxieties further. The girls reported being pleased about receiving 'likes' on their posts, particularly when the post was significant or personal to them and that 'likes' lifted their mood, made them feel popular and validated by others. Girls equated the level of likes received on a photo to level of popularity

because others users will 'like' the photo because they like you as a person, not simply because they like the photo. They felt bad about receiving only a small number of 'likes' and equated this to being disliked and unpopular. Expressions of jealousy and envy were mixed between the participants. The boys denied experiencing any feelings towards, and showed a complete lack of reaction to, their social media, however they were able to recognise how other social media users may feel about, for example, and receiving likes on a photo. Boys were critical about how authentic these feelings were, suggesting that those feelings were based on superficial social interactions and therefore not authentic.

2.1 Feelings evoked by reactions to posts- boys reported being unaffected by reactions from other users to their social media profiles, girls described a lift in their mood and what it means to them as a person.

- P1 (female, 12): "every time it pings it just gives you a little bit of extra happiness. It's really exciting, and it's got list here of who's liked it or commented, and it's really nice to scroll down and be like, wow"
- GWOI (female, 16): "I feel good about myself, like people actually care"

2.2 Feelings about lack of reactions to posts; boys reported being unaffected by a lack reaction to their social media profiles, however they were able to recognise that other users may feel sad and bad about themselves. Girls described negative impacts on their mood and what it meant to them as a person.

- GWF (female, 12): "Well if you get no likes you think all I did try and put a lot of effort into that. 'if I don't get likes I get mad' "and then people would say they've got no friends"

- P7 (male, 17): “it's just the numbers as far as I'm concerned, I don't care about how many it's just my friends I guess, so I don't worry about it”

2.3 Jealousy and envy; many participants denied feeling jealous of others when viewing their social media profiles. However, some female participants reported feeling jealous when seeing others spending time with their friends and envious about others confidence about posting online.

- P3 (female, 12): [asked about jealousy] “umm no because I always think, I might be having more fun than them because they might be having more fun than me then but I might be having more fun on a different day and they might think the same about me”
- P14 (female, 16): “the only thing the social media that would make me feel bad is when people hang out without you and then they post all about it.”

2.4 Fear of judgement from others; participants were concerned about unflattering photos online, and about appearing ‘weird or ‘boring’ to others. This was not discussed during the peer only discussion.

- P2: (female, 16): “Yeah, people very judgemental, and then you get the other people who don't know you and they will judge you, I judge people.”
- GWI (female, 12): “yeah, people judge you for not doing things or doing things when actually your phone might be charging”
- GWI (Female, 16): “I feel like once it's on Instagram you're quite exposed to ridicule from other people”



- P7 (male, 17) “well how people view me I guess, if I posted it, they would be like what's he saying, I'd feel a bit awkward as well”

### **3. Motivations**

Boys reported that their main activity on social media was direct communication with friends, whereas girls' use of the sites were more varied. Boys reported rarely posting, and denied any other use of the sites apart from looking at other people's activity, to 'see what's happening'. In individual interviews, all participants reported that they were only willing to post events that were significant or meaningful to them, because what they posted reflected on who they are as a person. They suggested that they wanted to reflect their interests and look 'good' and 'funny'. Boys in particular wanted to present their sense of humour because this was how they wanted to be perceived to the social world. Boys felt strongly that they would not post regularly or post selfies as they did not want to appear 'attention-seeking' and 'self-absorbed'. Interestingly, impression management was not discussed with friends. Responses about how accurately their profile portrayed them as an individual varied. Participants discussed aspects of themselves that they would not want online. This included a 'bad' photo of them, or any reference to their parents (e.g. photos of parents or parents posting on their wall). Boys, in particular, commented that they actively avoided presenting their opinion online.

#### **3.1 Reason for social media activity; posts had to be significant and meaningful to the individual.**

- P3 (female, 12): “I like to post something that is meaningful or when I've done something and I want everyone to see what I'm doing and that I'm having loads of fun”
- GWI (female, 12): “If you post something on social media it has to be a really big deal to you”

- GWI (Female, 16): “I do need to like the photo quite a lot for me to post it”

3.2 Self-presentation and impression management; participants thought about how they wanted to be perceived by others online. Boys in particular wanted to appear laid back and humorous.

- P5 (female, 12): “I would like them to think I'm fun and I'm a nice person but not really anything else, like I wouldn't want to come across as shy”
- P12 (female, 16): “so if someone saw it they would think that's kind of the person that she is”
- P6 (male, 17): “I tried to come off as just a casual guy, cool”

3.3 Aspects of myself I do not want on social media; this included negative aspects of the self, such as low mood. Boys in particular did not want to express their opinion online.

- P3 (female, 12): “I don't like being sad on there because I don't want people to feel sorry for me, if I'm sad it doesn't matter because everyone gets a bit sad. I don't need to put on there because it's my issue not theirs”
- P13 (female, 16): “I don't know why but I just feel like, it's quite personal, if my mum tagged me in something and I just won't put on my timeline”
- GWI (female, 16): “I think there's a whole bit of my life that I miss out on Instagram, you'd see the bits well, with my friends, but you wouldn't see all of it”

#### **4. Observations of others on social media**

The girls expressed concerns about other people's need to appear popular online, and the dilemmas that teens face in wanting to fit in, whilst also wanting to appear unique and avoiding peer

judgement. The younger girls appeared to agonise more about the ‘right thing to do on social media’. All participants recognised that adolescents can be ‘obsessive’ about social media and they tended to be critical of users who work hard to enhance their appearance online in order to increase their popularity status. There were mixed opinions about whether adolescents portray an accurate representation of themselves online, older male participants questioned how ‘genuine’ other social media users are. Whilst they acknowledged the reality of people’s actual life experiences; for example, going on holiday and socialising with friends, they were also aware that adolescents may enhance photos or work hard to gain many followers in an attempt to give the impression that they have a large social network and are popular.

4.1 Things other people do that I would not do/ judgement of others; Participants were critical of others users who seemingly put high levels of effort into their social media.

- P3 (female, 12): “I think sometimes people put more effort into a photo to social media than going out sometimes.”
- P14 (female, 16): “I just don't really put up selfies, it's kind of an attention seeking thing”
- P9 (male, 14) “obviously makes them feel good but it's attention seeking and obviously that's why I don't post selfies because I'm not self-indulged or anything”
- P8 (male, 17): “I think people in my age group do try and have loads of friends [on social media], it’s just personally I'm not that bothered about it”

4.2 *Cultures and ‘rules’*; participants recognised implicit social norms that appear to occur on social media, such as a need to appear popular and how ‘likes’ equate to popularity levels.

- P1 (female, 12): “yeah, we’re all being sheep, but in our eyes it’s not cool to be a sheep but we don't realise that we’re being one”
- GWOI (female, 12): “A nice group just wouldn't care, the popular group would be like, oh my days, I need to place this; in the unpopular group would be like, I need to see what my friends are up to”
- GWI (female, 16): ‘airing [not responding to a message] is a bit harsh, so look you can see she's opened that one, so she's opened it and then not replied’

4.3 Disinhibition effect; participants acknowledged that the internet allows users to behave in a way they would not offline.

- P15 (female, 16): “people think they can hide behind their profiles you would never say that to a person in real life if you saw them, you wouldn’t start calling someone a slut”
- GWI (male, 14): ‘they want to see what people think of them, because some people would say things on social media they wouldn’t say to someone’s face’
- GWI (male, 16): “and they can do it quietly and not your face, from the house on their own just typing”

4.4 False representations; opinions about the accuracy of personal representations and whether people are genuine on social media varied among participants

- P5: (female, 12) “I think they are different sometimes, they do probably try and make out they’re more than what they are online then offline, and then they brag about the amount of followers and then that makes them more popular at school as well

- P14 (female, 16): sometimes I think I really want to see and meet this person and then I see them at a party and they're just really dull, you just can't get a good impression of someone on social media.
- P6 (male, 17): 'I've seen a lot people do that, people cut things out and make up and seemed different to what they are'

## **5. Strategies to manage feelings evoked by social media**

Insufficient 'likes' or negative comments from other users were incidents that had a negative impact on the participants' self-esteem. All participants suggested practical strategies, in response these potential incidences, such as deleting a photo or blocking other users. Proactive strategies were also discussed, such as choosing sites where they believed they were more likely to avoid critical judgement from others. The majority of participants reported that they avoided certain activities online e.g. posting 'selfies' or posting opinions, in order to avoid personal criticism. Proactive strategies included minimal posting to avoid judgement from others. Most girls reported they would delete a photo if it did not receive a satisfactory number of likes, however, the boy's responses were mixed on this subject. Girls commented that looking through 'likes' and past memories lifted their mood. Older participants described learning from social media activity from a younger age, and having become more selective in what they do.

Participants also described rationalising how others use social media as a way of protecting their self-esteem, for example, they may believe that others are unlikely to be enjoying an event if they are posting during it, and reminding themselves that the number of 'likes' is not actually important.

5.1 Practical strategies; included proactive strategies such as avoiding certain sites, and reactive strategies such as deleting photos that received insufficient likes.

- P2 (female, 12): “it made me feel very bad [few likes on a post] so I deleted it, but I didn't like it anyway”
- GWI (female, 12): “you would just block them”
- P15 (female, 16): “if I started to get less again [likes] I'd probably be like what is it that's made that go down so I just find it easier not to post that much”
- P9 (male, 14): “I would have deleted it and I wouldn't feel great but is just that person's opinion”

5.2 Critical thinking; thinking critically about other users helped the participants to feel better about themselves.

- P1 (female, 12): “you don't judge a book by its cover. Someone might look really happy and rich, but inside they might be really miserable and upset because they have a really bad life and they just pay money in front of it”
- P12 (female, 16): “I've realised that actually people shouldn't really care and if I think they going to, they shouldn't, because it doesn't matter.”

## Discussion

In this study, in-depth interviews with adolescents were analysed thematically and the data was triangulated from three interviewing conditions. The study investigated how social media use impacts on adolescents' developing identity and self-esteem. The results will be discussed in relation to the research questions, prior research and relevant psychological theory. Clinical implications, limitations, and areas for future research will also be discussed.

### A new context for identity formation

The tasks of adolescence identified by Erikson (1968) and Marica (1966) appear to remain as relevant as they were when they were first conceptualized. Therefore, although developmental tasks in adolescence appear not to have changed, social media is providing a powerful new medium in which they can unfold. Similar to the findings of Davis' (2012), participants in this sample used social media to explore and express personal interests, which Gyberg and Lunde (2015) suggested serves as personal identity markers and a way of using the sites as a sounding board for feedback from peers. Since Cooley (1902) suggested that individuals internalise the opinions of others, which can in turn dictate an individual's self-esteem, responses on social media are likely to have a significant impact on the way adolescent feel about themselves. In this sample for example, the number of 'followers' and 'likes' appeared to be important sources of feedback. Happiness about receiving 'likes', was coupled with concerns about, not only the number of 'likes' they received, but whether they would receive any 'likes' at all. Similar to La Sala et al.'s (2014) findings, adolescents appeared to internalise this feedback and equated the quantity of 'likes' with popularity. Valkenburg et al., (2006) acknowledged the tendency for adolescents to focus on tone of feedback and numerical information, however, this study emphasised how the adolescent's

subjective appraisal of feedback in the form of numerical information, be that benign or hostile, could be crucial to their emerging sense of self.

Identity theory suggests that adolescent friendship groups provide a key context for exploring identity-related skills (Kroger, 2007) and that acceptance of peers is fundamental in identity formation (Erikson, 1968). Participants described feeling pressure to invest extended amounts of time in their social media in order to maintain friendships. Erikson's (1968) description of this stage of development as a 'crisis' suggests a complicated and fraught process, which is likely to be intensified by social media use. For example, Beyens et al.'s, (2016) findings suggested that 'FoMO' was strongly related to adolescents' need to belong which, in turn, increases Facebook use and feelings of stress. Participants also described difficulties in relation to switching off from social media at night, which is concerning given the potential negative impact of night time social media use on emotional wellbeing (Woods & Scott, 2016).

#### Self-esteem and self-presentation: the mediating role of judgement

Similar to Valkenburg et al.'s, (2006) findings, participants in this study described boosts in self-esteem in response to receiving positive feedback online. However, they also shared concerns about receiving critical comments online, because the likelihood of becoming a victim of a critical attack online is higher compared to offline environments. In order to prevent potential negative judgements, and preserve their self-esteem, participants used sites where the potential for criticism was minimal and utilised techniques that represented them in a positive light. Yang & Brown (2016) found that adolescents utilise such techniques in order to achieve 'likes' to boost positive feelings about the self; however, such strategies may only serve to superficially enhance self-esteem because the potential emotional dissonance between adolescents' views of themselves and their posts may remain; identity theory would suggest that, if such dissonance exists, such



experiences could hinder adolescents' ability to develop a consistent sense of self (Erikson, 1968; Harter, 1999). Participants also named reactive strategies to protect their self-esteem (such as blocking users). While such strategies provided some reassurance, adolescents remained anxious about the potential for negative experiences online. Identity theory highlights that representing oneself to the social world is inherently anxiety provoking in adolescence (Erikson, 1968); however, the public nature of social media may be amplifying such concerns.

#### Gender and age differences

Although an investigation of gender and age differences was not an explicit aim of this study, the findings in this area were interesting and therefore warrant a tentative discussion. Similar to findings in Davis's (2012) research, male participants stated that their social media use centred around online exchanges of a practical nature with friends, whereas female participants highlighted the importance of feeling connected to their peers, which was reflected in higher emotional connection scores on the 'Facebook intensity scale' (2007). Although male participants strongly denied any emotional connection to social media, their ability to hypothesise about how others might feel, suggested that may have insight into the possible impact of social media use on others' sense of self, and therefore they may be choosing to actively avoid this. Research has shown that teenage boys can mask insecurities in an attempt to conform to societal gender roles (Polce-Lynch, Myers, Kliewer, & Kilmartin, 2001), therefore, boys' intentions to represent themselves as laid back and humorous (which are perhaps more socially acceptable male traits) may serve as a self-protective strategy; however, this may also restrict them from reaping the potential benefits of identity exploration on social media, which could support healthy identity development (Marcia, 1980). Although a clear pattern of age differences did not emerge in this data, identity theory would suggest that individuals who progress successfully through adolescence agonise less about

how others perceive them and, therefore, may find social media use less stressful. Older adolescents may feel less overwhelmed by the many choices presented to them by the sites and may be less likely to engage with identity-related social media explorations because they feel more confident about who they are.

### Clinical implications

While research is indicating a relationship between social media use and low self-esteem, the direction of this relationship remains unclear (Blomfield Neira & Barber, 2014; Fullwood et al., 2016; O'Dea & Campbell, 2011; Woods & Scott, 2016). However, it is reasonable to infer that adolescents who present as emotionally vulnerable, for example those with low self-esteem, are more likely to be at risk of developing additional mental health difficulties, especially if they are intensive social media users and become dependent on the sites to regulate their emotions.

This study highlighted the additional pressures facing digital youth, which could potentially impact on their emotional wellbeing. Adolescents may feel overwhelmed by the sheer volume of feedback they receive on a regular basis and the abundance of online identity exploration choices, which may impact negatively on their ability to develop a coherent sense of self (Arnett, 2002). Although adolescents enjoy the ease of contact with their social world, the constant contact may be limiting their capacity to tolerate being alone, which is essential in developing a sense of self-efficacy (Shapiro & Margolin, 2014). Adolescents' developmental needs, coupled with their reduced ability to self-regulate their behaviour (Steinberg, 2007), means they may well have difficulties placing boundaries around their social media use, particularly at night time, which may significantly impact upon emotional wellbeing (Woods & Scott, 2016). Adults play a role in supporting adolescents to maintain a healthy, balanced relationship with social media, through encouraging breaks from the sites and supporting the development of relationships and interests in offline communities.

Although issues such as cyberbullying are obvious sources of concern, this study highlights the need to also focus on the subtler activities adolescents engage with on social media. Social media taps into adolescents' intrinsic need to separate from attachment figures and find an identity through appraising themselves in distinction to adult values. While social media provides a private domain for this to occur, the relative inaccessibility of social media for adults may mean that adolescents lose out from potential sources of support and guidance that could help them to find their way through the strengths and pitfalls of social media usage. Therefore, it is essential that clinicians in child and adolescent mental health services consider social media use during assessments, be curious about young people's social media choices and what they mean to them. Adolescents are likely to fear judgment and prohibition from adults, which could discourage them from disclosing their online experiences. This may be particularly so for boys who may be concerned about stigma. Collaborative psychological formulation that sensitively considers the role of social media in mental wellbeing and as an important context for adolescents, could provide an alternative approach. Clinicians should also focus on the potential opportunities for positive identity development online, such as refining of social skills (Blomfield Neira and Barber, 2014), friendship formation and intimacy development (Valkenburg & Peter, 2011); all of which could be particularly beneficial for socially anxious individuals in terms of allowing them to develop their ability to socialise in a way they may struggle to in offline contexts. Additionally, exploration of the potential damaging impacts of presentation of an idealised self-online and disinhibited behaviour need to be addressed.

While making mistakes is a common, and necessary part of growing up, the potential risks of making mistakes in the digital age are more pronounced with, arguably, more significant consequences. Given that exploration is key to healthy identity development (Erikson, 1968), it is important that adolescents are supported to safely explore online and to make informed decisions

about their online behaviour. As highlighted by D. Boyd (2014), social media is here to stay and strategies to restrict its use are ineffective; instead, adults should work alongside adolescents to support them in their social media use.

### Research limitations

The qualitative method utilised in this study allowed for in-depth insight into adolescents' views of their social media use, which is a novel approach within this area of research. A flexible interview schedule was beneficial for this subject area where research is scarce and the intention was to hear the voice of the young person. While the triangulation methodology increased the validity of the findings, the interview method meant that the potential for social desirability effects was high, looking at the participant's social media profiles during the interview served to reduce this bias by not solely relying on the participant's subjective perceptions. Although every effort was made to be mindful of subjectivity by remaining reflexive throughout, maintaining a research diary and utilising supervision, researcher bias, including the author being a social media user, may have played a role in the study findings. While an attempt was made to include a diverse sample in this study, the recruited sample were all white British and the majority from the same school. There was also a bias towards 12-year-old girls, which has resulted in a potentially unrepresentative sample that could limit the transferability of the results to other adolescents. Furthermore, participants volunteered to take part in this study and were therefore a self-selecting group, which may have introduced a sample bias.

### Future research

This study provides insight into potential strategies adolescents utilize to protect their emotions and feelings online. Future research should investigate whether individuals from a clinical population employ such strategies. Although this research did not intend to investigate the ways in which

different genders use social media, the difference was noticeable, therefore future research could explore this further. Researchers may hold some reservations about conducting research in a subject where technological advances are so rapid, however remaining open and curious to the insights of adolescents is key to conducting research in this area.

## **Conclusion**

This study supports identity formation theories conceptualised by Erikson (1968) and Marcia (1966), and demonstrates that social media is providing a powerful new context for adolescent identity formation to occur. This study explored how adolescent social media use impacts on identity formation and developing self-esteem. While adolescents are characteristically preoccupied with the opinions of others, digital youth may be particularly fearful of critical feedback online due to concerns related to the ‘disinhibition effect’, and the potential for experiences of shame to be projected more widely, not just within close friendship groups. This study supports previous research which suggest that adolescents internalise the feedback they receive online (La Sala et al., 2014), and that they are highly attuned to the quantifiable information, which was not available to pre-digital youth. Given that adolescents are characteristically anxious about how others view them (Harter, 1999), social media may be intensifying this anxiety. This puts further pressure on adolescents to be effortful in their social media activity and maintain a high level of presence in order to feel accepted within their social group (Beyens et al., 2016). This could impact negatively on adolescents’ ability to develop a coherent and stable self, and potentially have serious ramifications for their psychological wellbeing, particularly for those with pre-existing vulnerabilities (Rosenberg et al., 1995). While adults may attempt to restrict social media use in order to protect adolescents from the impact of its use, this may serve to encourage the adolescent to become more guarded and secretive. Instead, adults should perhaps adopt a curious and non-

judgemental approach to understanding how adolescents are using social media, in order to encourage an open dialogue that will allow for supportive conversations.

This study highlighted ways in which adolescents' cope with the feelings evoked by social media.

However, very little is known about how adolescents experiencing mental health issues use and feel about social media, nor how they cope with feedback. Further research in this area is required.

Overall, it is clear that social media is providing a new and defining context for identity development for many young people, with new challenges and opportunities for selfexploration and expression. However, scholarship is perhaps only just beginning to understand its longer-term implications for child and adolescent mental health and well-being.

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APRIL S. WARD BSc Hons

Section C: Appendix of supporting material

A thesis submitted in partial fulfilment of the requirements of  
Canterbury Christ Church University for the degree of  
Doctor of Clinical Psychology

APRIL 2017

SALOMONS

CANTERBURY CHRIST CHURCH UNIVERSITY

## Appendix 1. Focus group without out interviewer- instructions to participants

One of you will pretend to be the interviewer and will ask the others a series of questions. I'd like the interviewer to answer the questions too so that we can hear from all of you ☺! Ask the questions and then chat amongst yourselves. Please try to give me full answers and not just one-word answers. Try and be as honest as you can. Don't hold back!

I'll be on hand nearby but outside the room. If you get stuck, just give me a shout.

### Some other important things:

We don't want you to run out of time so please spend about 5-6 minutes on each question. You can use the stopwatch on your phone to help you keep a check. Make sure you keep chatting during this time and **try to keep on the subject!**

But most importantly, have fun!

- 1) How do teenagers feel about themselves when they get lots of likes/ shares/favourites/ retweets?
- 2) How do teenagers feel when they **don't** get many likes/ shares/favourites/ retweets? What do they do about it?
- 3) What do teenagers do to make themselves feel better if something annoys or upsets them online?
- 4) How do teenagers feel if they go offline for some time?
- 5) Do people present an unrealistic (or different) image of themselves online which is different to their offline personality? Why do you think they do that?

	Group with researcher	Individual interview with researcher
<b>Aims</b>	General views on presentation of self on social media and any discrepancies with offline self/reality. Specifically, how this is negotiated and communicated in a peer group setting with the interviewer	Representation of the self-online Different identities on different sites and associated similarities/discrepancies; how are these managed? Comparison with peers

Appendix 2. Interview schedule- individual interviews and focus group with the researcher

<b>Warm up questions</b>	<p>How long have you been friends? Which social media sites do you use? How much do you use them and what for? What are your favourite sites? What do you like/ not like about these sites? Who posts the most out of all of you? What do you share on social media? In what form (pictures, blogs, statuses etc)?</p>	<p>‘Thank for doing so well in the other tasks’, explain that this section is about their individual views.</p>
<b>Self- Esteem Questions/</b>	<p>Do you ever feel jealous about what others put on social media? What do you do when you feel jealous?</p> <p>Do you ever feel like people are having more fun/ have better friendships than you do? What do you do?</p> <p>How would you feel and what would you do if no one commented/ liked your posts? Or if you got negative feedback?</p>	<p>What made you post...(looking at social media profile)? What were you imagining people would think of you when you posted that?</p> <p>How do you feel if you get positive/ negative comments on what you post? What do you do?</p> <p>How do you feel if you don’t get any likes/ comments on what you post? What do you do?</p> <p>I see you have (number of likes/comments), how did that make you feel?</p> <p>Do you feel happy with the way you come across on social media? Are there times when you haven’t? What did you do?</p>

<b>Adolescent Developmental theory</b>	<p>If I never met you, would your social media profile give me a good idea of who you are and what you're like? Are you different in offline life? If yes, what's the difference And why is online self different from offline self?</p> <p>What do you want people to think of you as a group when they look at your profiles?</p> <p>What sorts of things do you all post/share online? (if they don't post)</p>	<p>What does your profile say about you? Is there anything you don't want on there?</p> <p>What do you want people to think of you when they look at your profile?</p> <p>Do you post different things on different sites? Why? Which profile do you like the most?</p> <p>Have you deleted anything from your profile recently? Why?</p>
	<p>What stops you posting photos/statuses?</p>	<p>Is how you present online the same or different from how you are offline? (add specific?) if different, why's that? How do you manage that?</p>
<b>Emotional investment Questions</b>	<p>How would you all feel if you weren't able to use any social media, say for a week?</p> <p>Do you feel disconnected as friends if you haven't logged onto social media? Or do you connect in other ways?</p> <p>Do you share most of your day to day activity through social media? What do you choose to share?</p>	<p>Is using social media part of your everyday routine?</p> <p>How do you feel if you haven't been able to go online for a while?</p> <p>Any upsides to this or only negatives?</p> <p>follow-ups to this question.....</p> <p>Do you have your phone in your bedroom at night?</p> <p>If yes, do you leave your phone on through the night or switch it off? Do you check it in the night etc?</p> <p>Do you check it in the night?</p>



About your social media use:

**1. Social media is part of my everyday activity**

1 = strongly disagree      2              3              4              5 = strongly agree

**2. I am proud to tell people I'm on social media**

1 = strongly disagree      2              3              4              5 = strongly agree

**3. Social media has become part of my daily routine**

1 = strongly disagree      2              3              4              5 = strongly agree

**4. I feel out of touch when I haven't logged onto social media for a while**

1 = strongly disagree      2              3              4              5 = strongly agree

**5. I feel I am part of the social media community**

1 = strongly disagree      2              3              4              5 = strongly agree

**6. I would be sorry if social media shut down**

1 = strongly disagree      2              3              4              5 = strongly agree

**7. Approximately how many TOTAL social media friends do you have?**

**8. In the past week, on average, approximately how much time PER DAY have you spent actively using social media?**

Appendix 4. Consent form and information sheet

**CONSENT FORM (For parent)**

**Title of Project:** How does social media use impact on identity formation and self-esteem in young people?

**Name of Researcher:** April Wiltshire

Please initial box

**1. I confirm that I have read and understand the information sheet for the above study. I have had the opportunity to consider the information, ask questions and have had these answered satisfactorily.**

**2. I understand that my child's participation is voluntary and that they are**

**free to withdraw at any time without giving any reason.**

**3. I agree for my child to be audio and video taped and understand that the recording will be stored securely.**

**4. I agree that anonymous quotes from my child's interview may be used in published reports of the study findings.**

**5. I agree to my recordings being used in other research projects, subject to the approval of a research ethics committee**

**6. I agree for my son/daughter to take part in the above study.**


Name of Parent/ guardian \_\_\_\_\_ Date \_\_\_\_\_

Signature \_\_\_\_\_

Name of Participant \_\_\_\_\_ Date \_\_\_\_\_

Signature \_\_\_\_\_

Name of Person taking consent \_\_\_\_\_ Date \_\_\_\_\_

Signature \_\_\_\_\_

to drop out at any time without giving any reason.

3. I agree to be audio and video taped and understand that the recording will be stored securely.

4. I agree that anonymous quotes from my interview may be used in published reports of the study findings.

5. I agree to my recordings being used in other research projects, subject to the approval of a research ethics committee.

6. I agree to take part in the above study.

### **CONSENT FORM (For young person)**

**Title of Project:** How does social media use impact on identity formation and self-esteem in young people?

**Name of Researcher:** April Wiltshire

Please initial box

1. I confirm that I have read and understand the information sheet for the above study. I have had the opportunity to think about the information, ask questions and I am happy with the answers.

2. I understand that my involvement is voluntary and that I am free

Name of young person \_\_\_\_\_ Date \_\_\_\_\_

Signature \_\_\_\_\_

Name of Person taking consent \_\_\_\_\_ Date \_\_\_\_\_

Signature \_\_\_\_\_



## Information about the research



### **How does social media use impact on identity formation and self-esteem in young people?**

Hi! My name is April and I'm a Trainee Clinical Psychologist at Canterbury Christ Church University. I would like to invite you to take part in a research

study. Before you decide whether you would like to take part, it is important that you understand why the research is being done and what it would involve for you.

Talk to others about the study if you wish.

Part 2 gives you more detailed information about the study and what we will ask you to do if you decide you'd like to take part?

### **What is the purpose of the study?**

The purpose of this study is to understand more about how young people use social media and how it impacts on the way you feel about yourself and your friendships.

### **Why have I been invited to take part?**

We are asking people who are aged between 11- 16 and you use social media.

### **Do I have to take part?**

No. It is entirely up to you to decide if you would like to join in with the study. If you do agree to take part, I will ask you to sign a form saying that you understand what the study is about and you are happy to take part. You are free to pull out of the study at any time, and you don't have to give me a reason if you don't want to.

### **What will happen to me if I take part?**

First of all I will ask you and your friends to take part in a tape-recorded talk with me about social media. Then I will leave you and your friends in the room to interview each other about social media using a video recorder. Then I will tape record a chat with each of you on your own. I will record our discussion but only my supervisors and myself will listen to the tape and the tape will be destroyed once I've listened to it.

### **What will I have to do?**

Take part in a filmed discussion between you and your friends and a recorded chat with me about your social media use.

### **What are the possible disadvantages and risks of taking part?**

Sometimes people may talk about personal things that they might find upsetting or embarrassing. If this happens, I will do my best to support. We can stop the interview if we need to and you can leave the research at any time. If I'm worried about bullying or mental health problems I will also offer you information on support services such as Bullying UK 08088002222, and charities such as Young Minds ([http://www.youngminds.org.uk/for\\_children\\_young\\_people](http://www.youngminds.org.uk/for_children_young_people)). I can also tell you how to access your local children and mental health service if you feel you need support from them. And if become worried about yours or anyone's else's safety I will discuss this with you first and then talk to the right person (e.g. parent, school SENCO or safeguarding staff, social services).

### **What are the possible benefits of taking part?**

We cannot promise the study will help you directly, however, the information we get from this study will help us to understand better the effects that social media has on how young people feel about themselves and others. And it will be fun!

### **What if there is a problem?**

Any problems or complaints about the way you have been dealt with, or any possible harm you might suffer during the study, will be addressed. Detailed information about this is given in Part 2.

### **Will my taking part in the study be kept confidential?**

Yes. All information about you will be kept private. Details about this are included in Part 2.

**This completes Part 1.**

**If the information in Part 1 has interested you and you are thinking you might like to take part, please read the additional information in Part 2 below before making your decision.**

## **Part 2 of the information sheet**

### **What will happen if I don't want to carry on with the study?**

You can pull out of the study at any time without having to give me any reason.

If you do decide that you want to pull out from the study part way through, we would like to use whatever material we have already recorded with you. However, if you are not happy for us to use the recording from your individual interview, all of it will be destroyed. Group recordings will only be destroyed if requested by all group members.

### **What if there is a problem?**

If taking part in the study has upset you in anyway and you would like to speak to someone about it, you can speak to my study supervisor Sadie Williams (contact details at the bottom of the sheet).

### **Complaints**

If you have a concern about anything in the study, you should speak to me and I will do my best to answer all your questions. If you are still unhappy and wish to make a complaint, you can do this

by contacting the Research Director at my University. His name is Professor Paul Camic and his phone number is 03330117070.

**Will my taking part in this study be kept private?**

The recordings of our meeting will be kept locked away on a password-protected device and only my supervisors and I will listen to them. Any information I have about you will have your name removed so that you cannot be recognised. The information you give will be used for this research study. It may also be used in future studies but we will ask for approval from official research committees before doing this. Your information will be kept for a maximum of 10 years after the study has finished, after this time it will be destroyed.

We will only tell others what you've said during our discussion if we are worried about your or someone else's safety. In this case we will have to tell your school's safeguarding lead, but we will talk to you about this before we do.

**What will happen to the results of the research study?**

All participants will be asked if they would like to hear about the results of the study, and they will be asked how they would like the information to be given to them (e.g. in an email/ letter, or phone call). The results may also be published in a psychology journal for others to read. Your personal details will not be included in any write up but we will ask for your permission to include anonymous quotes.

**Who is organising and funding the research?**

The University where I am studying. This is Canterbury Christ Church University.

**Who has reviewed the study?**

In order to protect your safety, all research is looked at by an independent group of people, called a Research Ethics Committee. The university research committee has reviewed this study and it has given me permission to go ahead with the study.

**Further information and contact details**

If you would like advice about whether you should participate or if you have any concerns about the study please contact either of my research supervisors, Linda Hammond [linda.hammond@canterbury.ac.uk](mailto:linda.hammond@canterbury.ac.uk) or Sadie Williams [sadie.williams@slam.nhs.uk](mailto:sadie.williams@slam.nhs.uk)

If you would like to speak to me and find out more about the study or have questions about it answered, you can leave a message for me on a 24-hour voicemail phone line at 03330117070. Please say that the message is for me, April Wiltshire, leave a contact number and I will get back to you as soon as I can.

## Appendix 5. Research diary (abridged)

This has been removed from the electronic copy

## Appendix 6. Salomons ethics approval letter

This has been removed from the electronic copy



Appendix 7. Participant demographics and full measure scores

Participant	Age (years)	Gender	Part of everyday activity	Proud to tell people I'm on	Part of daily routine	Out of touch if I haven't logged in	Part of a social media community	Sorry if it shut down	Average emotionally connection score	Total social media friends	Time per day (minutes)
1	12	Female	3	3	2	4	3	4	3.2	301–400	30
2	12	Female	3	3	2	2	4	4	3	101–150	30
3	12	Female	4	4	3	3	5	4	3.8	> 400	60
4	12	Female	4	5	4	2	3	4	3.7	101–150	60
5	12	Female	4	4	4	2	3	4	3.5	11–50	60
6	17	Male	4	3	3	2	2	4	3	151–200	60
7	17	Male	4	3	4	2	3	4	3.3	151–200	90
8	17	Male	4	3	3	5	3	2	3.3	151–200	300

9	14	Male	4	4	4	4	4	2	3.7	151–200	240
10	14	Male	3	2	2	1	3	1	2	51–100	30
11	14	Male	3	3	3	2	3	2	2.7	51–100	10
12	16	Female	5	4	5	4	3	4	4.2	> 400	360
13	16	Female	5	4	5	4	3	3	4	> 400	300
14	16	Female	5	4	5	5	2	5	4.3	> 400	330
15	16	Female	5	4	5	4	4	4	4.3	> 400	420

## Appendix 8: Theme development flow chart

**Transcripts were systematically worked through by hand and interesting aspect of the data were noted**

(Individual interviews x15 transcripts, focus group with interviewer x4 transcripts, focus group without interviewer x 4 transcripts)



**Initial codes were generated and transferred to Microsoft Excel spread sheet**

The codes from each condition were transferred onto 3 separate excel tabs; a tab per interview condition. Each tab contained a column of codes for each transcript. Corresponding group condition and participant number, age and gender codes were added to each code in order to indicate the origin of the code (e.g. GWI (girls, 12) = group with interviewer, 12-year-old girls) and corresponding extracts were grouped together



**Searching for themes**

Codes across the entire data set were reviewed and organised under broad themes/ ideas. Broad themes were noticeable patterns and important aspects of the data that were relevant to the research question. The conditions and age gender/ of the participants were colour coded in order to provide a visual representation of prevalence. Any outliers were kept in a separate tab so they could be revisited. 17 broad themes were identified across conditions:

1) Strategies

- 2) Investment
- 3) Observations of social media 'use' and 'cultures'
- 4) Hate comments/ disinhibition effect
- 5) False representations
- 6) Posting on social media
- 7) Trust and privacy
- 8) How I'm viewed by others/fear of judgement,
- 9) Posting on social media
- 10) Self-presentation and impression management
- 11) Parts of myself I do not want online
- 12) Feelings evoked by reactions to your social media posts
- 13) Feelings evoked by lack of reactions to your social media posts
- 14) Aspects of myself I don't want online
- 15) Jealousy and envy
- 16) Fear of judgement online
- 17) Parental restrictions



### **Reviewing themes**

The broad themes were reviewed to see if there was sufficient data to support them and whether they were prevalent and/or meaningful across both participants and conditions, those that were not were discarded.

For example:

1) Parental restrictions: this only talked about by 12-year-old girls in individual interviews, and mentioned by one 14-year-old boy in an individual interview. 2) Trust and privacy: only discussed by 12-year-old girls

If prevalence of codes within the theme were prevalent across participant group and/or interview condition they were kept. For example, self-presentation and impression management was prevalent across participants, but not across groups. Whereas strategies were prevalent across all participants and interview conditions. Compare broad themes with one another in order to see if they could be combined, or broken down into subthemes. Of the 15 broad themes, 2 were broken down (investment and strategies) into subthemes to provide clearer definition of the topic. For example: investment was broken down into, night time use, practical issues related to living without social media, feelings associated to living without social media, pressures of social media involvement and night time social media use. Others were combined to form one overarching theme, for example: feelings evoked by reactions to posts, feelings about lack of reactions to posts, jealousy and envy, fear of judgement were grouped under the theme ‘feelings evoked by social media use’. Data within the themes was reviewed to make ensure they related to each other clearly, and data across themes were reviewed to ensure they were meaningfully related while being distinct from each other.

Appendix 9: Searching for themes: Feelings evoked by social media example (colour coded to provide a visual representation of prevalence across groups and participants) **KEY:**

Individual- 12-year-old girls	Group with Interviewer- 12-year-old girls	Independent Group- 12-year-old girls
Individual- 14-year-old boys	Group with Interviewer- 14 year old boys	Independent Group- 14-year-old boys
Individual- 17-year-old boys	Group with Interviewer- 17-year-old boys	Independent Group- 17-year-old boys
Individual- 16-year-old girls	Group with interviewer- 16-year-old Girls	Independent group- 16-year-old girls

Subtheme: Feelings evoked by reactions to posts

Reactions to your social media- individual	Reactions to your social media- with interviewer	Reactions to your social media- without interviewer
P1 (girl, 12): Happy with response to meaningful photo, 'favourite time'	GW1 (girl, 12): Concern about misinterpretation of messages on sm, cause arguments with friends offline.	GWO1 (girls, 12): Likes make you feel good
P2 (girl, 12): Happy with reaction to self made video, pings are exciting	GW1 (girl, 12): All agree look out for likes, after posting	GWO1 (girls, 12): Likes mean people like you
P4 (girl, 12): A lot of likes compared too usual, made happy	GW1 (girl, 12) Always worry about negative feedback	GWO1 (girls, 12): Some would feel popular about likes some don't care/feel bad
P9 (boy, 14): Would delete if got negative comment on post, and would feel bad	GW1 (girl, 12) Don't get negative comments	GWO1 (girls, 12): Feel bad if normally don't get likes, exciting to get lots if don't normally
P10 (boy, 14) Judgement of number likes based on ratio to number of friends/followers	GW1 (boy, 14): Others opinions don't matter	GWO1 (girls, 12): Reactions to your sm depends on popularity
P10 (boys, 14) not bothered	GW1 (boy, 14): Not affected by likes,	GWO1 (girls, 12): Especially

about number of likes	don't check	happy if don't usually get likes
P6 (boy, 17) Don't care about likes etc.	GWI (boy, 14): Don't care about reactions/potential for bullying	GWOI (girls, 12): Reactions to no sm depends on popularity
P12 (girl, 16): likes are validation from others, feel good about appearance	GWI (boys, 17): Don't need lots of likes, not bothered	GWOI (girls,12): Popular people have lots of friends and followers
P12 (girls, 16) once made to feel bad- someone made fun online	GWI (girls, 16) No of likes is reflective of friends	GWOI (boys, 14): Would feel good with lots of likes
P13 (girls, 16) constant contact with friends provides reassurance	GWI (girls, 16) Assess which type of posts get more likes	GWOI (boys,14) Likes equals popular, increase self-esteem, feel good, some not affected
P14 (girls, 16) getting more likes, started to care more	GWI (girls, 16):Happy when I'm someone's BF and they're not mine (as decided by app)	GWOI (boys,17): Happy/proud about likes but it's not real
P15 (girl,16) depends on post- just me, feels more personal	CODE- GWI (girls, 16) Likes are reflective of friends	GWOI (boys, 17): Don't like your post, like the person
		GWOI (boys, 17): They feel popular but it's not true
		GWOI (girls, 16): Feel good about likes, means people care about you/ appreciate
		GWOI (girls, 16): Lots of likes means you have lots of friends
		GWOI (girls, 16) Leave list of requests, makes me feel wanted

Subtheme: Feelings evoked by lack of reactions to posts

Lack of reaction to your social media- individual	Lack of reaction to your social media - with interviewer	Lack of reaction to your social media - without interviewer
P1 (girl, 12): embarrassed about friend request being denied	GW1 (girl, 12): No likes, mad, let down, no friends.	GWO1 (girls, 12): Feel bad with no likes
P2 (girl, 12): Ok with no likes when not your friend	GW1 (girls, 16): No likes, people will think no one likes me	GWO1 (boys,14): No likes, don't care/ bad sad
P2 (girl, 12): Will ask about friend request offline	GW1 (girls, 16): Knocks your confidence	GWO1 (boys,14): Would feel bad, I don't care
P2 (girl, 12): Deleted a photo with no likes, felt bad	GW1 (girls, 16): Paranoid if someone doesn't reply	GWO1 (boys, 17): No likes, ashamed/ take it down
P5 (girl, 12) No likes, feel embarrassed and unpopular	GW1 (girls, 16)SM makes conversation more casual/ reduces risk of rejection	GWO1 (boys, 17): No likes, feelings, depends on person
P9 (boys, 14) Not bothered by low followers	GW1 (girls, 16): depends on type of post, photo of self feel more personal	GWO1 (boys,17) No likes, they worry about losing friends
P6 (boy, 17) Not bothered about no likes	GW1 (girls, 16)If conversation ends- feel like a failure	GWO1 (girls, 16) Knocks your confidence
P6 (boy, 17) wouldn't take things down with few likes		GWO1 (girls, 16) No likes affect me
P7 (boy, 17) don't care about amount of friends		
P8 (boy, 17) OK with no response to post		
P12 (girls, 16) Would wonder why likes went down		
P14 (girls, 16) seeing other		



people hanging out makes me jealous		
P15 (girls, 16) wonder why likes go down		
P15 (girls, 16) sad when constant contact is broken		

## Appendix 10: Theme progression, examples of codes with transcript excerpts

### THEME- Feelings evoked by social media use

#### Subtheme: Feelings about reaction

- **CODE- P2 (girl, 12): Happy with reaction, pings are exciting:** “every time it pings it just gives you a little bit of extra happiness, it's really exciting, and it's got list here of who's liked it or commented and it's really nice to scroll down and be like wow”.
- **CODE- GWOI (girl, 12): Likes makes you feel good about yourself:** “you feel really good about yourself because loads of people like you”
- **CODE- GWOI (girl, 12): Especially happy if don't usually get likes:** “except when you normally get five and then you get 11 you're on top of the world”.
- **CODE- P12 (girl, 16) likes are validation from others, feel good about appearance:** “it's satisfying if you get a lot of likes, it's a validation from other people. it makes you feel good about your appearance”
- **CODE- GWI (girls, 16) Likes are reflective of friends:** “I know the amount I like to get is reflective of how many friends I have and that's fine with me”
- **CODE GWI (girl, 16) Happy when I'm someone's BF and they're not mine (as decided by app):** “I know it's a bad thing but it makes me feel like yes, I don't care about the rankings of best friends, I have no idea of my order”
- **CODE- GWOI (girls, 16) Feel good about likes, means people care about you/ appreciate:** ‘I feel good about myself like people actually care’
- **CODE- GWI (boy, 14): Others opinions don't matter:** “I don't really care it's their opinion, is really just what I think about myself”

- **CODE GWOI (boys, 14): Would feel good with lots of likes:** “they feel quite good about themselves”
- **CODE- P6 (boy,17) Don’t care about likes:** “so five people liked it but I’m not really worried about that”
- **CODE P10 (boy,14) not bothered about number of likes:** “it’s just the numbers far as I’m concerned, I don’t care about how many”

**Subtheme: Lack of reaction**

- **CODE- P1 (girl, 12) embarrassed about friend request being denied:** ‘if someone denied my request I’d be a bit embarrassed it’s like going up to someone and saying hey dude want to be my friend and I say no’
- **CODE- P2 (girl, 12) Deleted a photo with no likes, felt bad:** ‘it made me feel very bad [few likes on a post] so I deleted it, but I didn’t like it anyway’
- **CODE- P5(girl, 12) No likes, feel embarrassed and unpopular:** “[how would you feel if you got no likes?] I would feel quite embarrassed. It would sort of mean I’m not popular”
- **CODE- GWI (girl, 12) No likes, mad, let down, no friends:** ‘Well if you get no likes you think all I did try and put a lot of effort into that’ ‘if I don’t get likes I get mad’
- **CODE- P12 (girls, 16) Would wonder why likes went down:** ‘I didn’t really care that I had 60 or so likes, I don’t mind I just think why did one get this many and that didn’t get as many’
- **CODE GWI (girls, 16): Knocks your confidence:** “it knocks your confidence, that’s why I wouldn’t want to post again”
- **CODE GWOI (boys,14): Would feel bad, I don’t care:** ‘personally I don’t really care but don’t know about other people’

- **CODE P8 (boy,17) OK with no response to post:** *"I wouldn't mind [no likes], I just put it out there because I like it"*
- **CODE GWOI (boys,17) No likes, ashamed/ take it down:** *"they feel ashamed, so they might take off"*
- **CODE GWOI (boys,17) No likes, they worry about losing friends:** *"people like people who use it"*

## Appendix 11: Feedback to participant and Salomons ethics board

Dear (name of participant)

Project title: How is social media use impacting on adolescent identity formation and their developing self-esteem?

As you may remember you kindly took part in interviews for my study. I wanted to find out teenager's views on their social media use, how it makes them feel about themselves and what you do to manage those feelings. Now that all the interviews have been completed and analysed I am writing to you to summarise what I found.

In total 15 young people (girls and boys) aged between 12 and 17 years old took part in the study. All participants took part in a group discussion with their friends that was led by me. Then I left you alone with a task, where you were asked to discuss a set of questions. And then each participant took part in a one to one interview with me, whilst we looked at your social media profiles. I was very pleased to hear your views about social media and there were some very interesting findings.

### Findings:

The importance of social media varied across all the participants. Girls talked more about how important the sites were in terms of connecting with their friends and they were more worried about how it effected friendships. Some of you mentioned that the importance of social media among teenagers can be quite stressful as you feel the pressure to make an effort with your profiles and keep up with what others are doing online. The boys talked about how social media helps them to talk to friends and make arrangements. Boys seemed to be less worried about making an effort with their social media.

It seemed to me that the number of 'likes' and 'followers' is an important form of feedback on social media and for some people it can reflect levels of popularity. The way teenagers come across on social media seemed to be quite important and you were careful about what aspects of yourselves you put online. Teenagers seemed to notice that all social media users want to come across well on social media, but no one wants to look 'self-absorbed' or 'attention seeking', so social media users are thoughtful about how they come across. This can include not posting too much, or posting lots of selfies. What seemed to be an important concern for all teenagers was the risk that you might get criticised by others online, or receive hate, which is one of the main reasons adolescents are thoughtful about what they do online.

Social media is a great tool for young people because it helps you connect with friends and find funny and interesting things. However, it can all put more pressures on teenagers, compared to teenagers who didn't grow up with social media. Teenage years are a time for exploring the world and finding out who you are, and it is very normal to make mistakes during this time. But for teenagers these days, there is a risk that your mistakes are seen world-wide and that is a real concern for all teenagers and their parents and teachers. For this reason, it is very important that adults support teenagers in your social media use and encourage open, non-judgmental conversations.

I really appreciated your participation in my study. I very much enjoyed meeting with you all and I was very interested to hear what you all had to say.

If you have any questions about the study, please do not hesitate to contact me [a.s.ward549@canterbury.ac.uk](mailto:a.s.ward549@canterbury.ac.uk)

Yours sincerely

April Ward (was Wiltshire)

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